



**THAI MUSICAL INSTRUMENTS BASED ON
ARCHAEOLOGICAL AND OTHER RELATED SOURCES
FROM THE ANCIENT TO MEDIEVAL PERIOD IN
INDIAN CONTEXT**

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**Key to the pronunciation of transliterated
Sanskrit letters**

<i>a</i>	as in <i>but</i>	<i>n</i>	as in <i>no</i> (dental)
<i>ā</i>	as in <i>far</i>	<i>ṇ</i>	as in <i>nil</i> (cerebral)
<i>ai</i>	as in <i>aisle</i>	<i>ṅ</i>	as in <i>sing</i> (guttural)
<i>au</i>	as in <i>house</i>	<i>ñ</i>	as in <i>sing</i> (palatal)
<i>b</i>	as in <i>bat</i>	<i>o</i>	as in <i>note</i>
<i>bh</i>	as in <i>abhor</i>	<i>p</i>	as in <i>pin</i>
<i>ch</i>	as in <i>church</i>	<i>ph</i>	as in <i>uphill</i>
<i>chh</i>	as in <i>churchhouse</i>	<i>r</i>	as in <i>road</i>
<i>d</i>	as in <i>do</i> (dental, see note below)	<i>ri</i>	as in <i>rill</i> (this should be trilled)
<i>d</i>	as in <i>do</i> (dental, see note below)	<i>s</i>	as in <i>sun</i>
<i>ḍ</i>	as in <i>do</i> (cerebral, see note below)	<i>ś</i>	as in <i>shell</i>
<i>dh</i>	as in <i>madhouse</i> (dental)	<i>sh</i>	as in <i>shun</i> (lusher than the s sound)
<i>ḍh</i>	as in <i>mudhut</i> (cerebral)	<i>t</i>	as in <i>Tom</i> (dental)
<i>e</i>	as in <i>ray</i>	<i>ṭ</i>	as in <i>Tom</i> (cerebral)
<i>g</i>	as in <i>good</i>	<i>th</i>	as in <i>anthology</i> (dental)
<i>gh</i>	as in <i>loghut</i>	<i>ṭh</i>	as in <i>anthill</i> (cerebral)
<i>h</i>	as in <i>hat</i>	<i>u</i>	as in <i>pull</i>
<i>ḥ</i>	an aspirate followed by a short echo of the preceding vowel; thus <i>sah</i> would be pronounced sa-ha; <i>tih</i> , ti-hi	<i>ū</i>	as in <i>fool</i>
<i>i</i>	as in <i>fit</i>	<i>v</i>	as in <i>voice</i>
<i>ī</i>	as in <i>eel</i>	<i>y</i>	as in <i>yet</i>
<i>j</i>	as in <i>judge</i>		
<i>jh</i>	as in <i>judgehouse</i>		
<i>k</i>	as in <i>kite</i>		
<i>kh</i>	as in <i>inkhorn</i>		
<i>l</i>	as in <i>long</i>		
<i>m</i>	as in <i>mill</i>		
<i>m̐ or ṁ</i>	a pure nasal (<i>bom</i> would be pronounced like the French <i>bon</i>)		

Note : cerebrals (*t, ṭh, ḍ, ḍh, ṇ*) are pronounced with the tongue retroflexed, i.e. turned up and back against the roof of the mouth dentals (*t, th, d, dh, n*) are pronounced with the tip of the tongue against the back of the of the upper front teeth.

SYNOPSIS

Music has been prevailing in human society since pre-historic times. Gradually, it reached its classical forms. No music can be complete without musical instruments. Hence study of musical instruments from various angles is an important aspect of cultural studies.

Southeast Asia comprises the continental margins and offshore archipelagoes of Asia lying south of China, north of Australia, and east of India. Its continental portion embraces the autonomous nations of Burma, Thailand, Laos, Cambodia, Vietnam, Indonesia and Philippines. It also includes Malaysia. By the early Christian Era, Chinese and Indian merchants had already extended their trading networks well into Southeast Asia. Lured by the area's natural wealth, they had opened both overland and maritime trade routes to tap its minerals, spices and jungle products. Into the Neolithic villages and port settlements Indians had peacefully begun to introduce skills, social patterns and religions of the civilizations. Indian settlements grew up along the trade routes as they waxed commercially, spread their religious and political influence. Sanskrit scholars, monk and priests settled and helped consolidate these communities into regional, theocratic, and socially stratified "Indianized states" economically based upon irrigated rice agriculture. These Indianized states were variously and at different times either Buddhist or Hindu-Brahmin in their dominant religious orientation.

It is intricate to draw cultural boundaries of Southeast Asian countries precisely as the influence of Indian and Chinese civilizations spread evenly to all these countries. Though the elements of native cultures that outlived the onslaught of these influencing cultures and variance in the adoption of the influence provides us some ground for cultural demarcation, most of the aspects of these cultures would be seen overlapping each other. Corollary to it, it is difficult to segregate Thailand culturally from Southeast Asia and most parts of studies regarding various aspects though slight differently would apply to all these countries and vice versa.

Thailand's landscape is one of high mountains at the edge of the Himalayan chain, of fertile alluvial plains dotted with rice paddies, and of sandy beaches and tropical forests set amid the latitudes of the Asian monsoons. The main body of the country is surrounded by Myanmar on the west and northwest, Laos on the northeast and east, Cambodia on the southeast, and the Gulf of Thailand (Gulf of Siam) on the south. The major influences on Thailand's climate are its location on the Indochinese Peninsula within the sphere of the tropical monsoons and certain topographic features that modify the effects of the rains. Beginning in May, warm humid air masses flow northeastward over the region from the India Ocean, depositing great quantities of rain that reach a maximum in September. Between October and February, the wind currents are reversed, and cold, dry air masses are driven in from the northeast. Stagnant air in March and April is associated with the hot, dry season.

Before 11th century A.D., Thailand as well as India had rich cultural traditions of musical instruments like, lute, flute and drums. This is evident from various archaeological and historical sources. Music had been an important aspect of religious rites and ceremony of both these countries.

History of Thai music was and is propagated largely through folklore, legends, verbal transmit and precept of a few experts in the field. While expounding the history of Thai music the researchers, historians and veterans generally overlook the importance of archaeological and historical evidences. Thus, the concepts put forward by them are at times erroneous, incredulous, paradoxical and incoherent with the concrete evidences. Many Thai scholars have studied various aspects of Thai musical instruments.

For instance, Dhanit Yupho, "Thai musical instruments", 1971, and Montri Tramod, "History of Thai music", 1985. After going through these and other significant works it was felt that, though they acknowledge that several characteristics of present day Thai music have evolved from Indian music, they have disregarded the archaeological and historical evidences to substantiate the observation. Hence no serious work has been undertaken to establish Indian influence based on these evidences resulting in omission of finer details and important facts. The evidences include the representations of musical instruments and practical postures of music players depicted on the slabs, panels, lintel, sculptures, epigraphy etc., of Thailand. These materials are necessary for appraisal of the art of music, as it flourished in ancient Thailand.

It is clearly seen that the musical instruments of Thailand has strong influence of the Hindu and the Buddhist civilizations from India. Important sects of Hinduism and Buddhism were followed by the people living in this region before they called themselves “Thai”. For example European and Thai archaeological excavations and explorations covered the central part of Thailand, including Nakorn-Pathom, U-Thong, Ratchburi, Ayudhya, Prachinburi, Kanchanaburi and Petchburi. It also included the early kingdom of Thailand called “Dvaravati” whose center is believed to have been situated in the central part of Thailand. This kingdom flourished from the 6th to the 10th centuries A.D. Though literary evidence does not give much information about Dvaravati, architectural remains and sculptures from this period provide important data for the artistic achievements. They indicate influences from various parts of India.

Stucco reliefs of female musicians in the Dvaravati style are depicted with a range of traditional musical instruments including cymbals, flute and *vīṇā*. The facial features, clothing style and jewellery depicted are reminiscent of work found in Indian monuments of the same era. None of Thai scholars was interested in a cross-cultural study of history of Thai musical instruments between Thailand and India.

This study aims to investigate Indian civilization related to music in Thailand and countries in Southeast Asia before 11th century A.D., such as Myanmar, Indonesia, Cambodia and Champa. These countries have a close relationship with India and this study will address characteristics of musical instruments found in each of these countries which are like those of

Thailand. The followed plan of work is envisaged to study the influences of Indian civilization in Thai territory in regard to social patterns and religions through Thai musical instruments based on archaeological and other related sources.

This study is intended to bring out the relationship of musical instruments of India and Thailand. Historical and archaeological evidences provide example of the culturality of music in political, social and cultural life, religious thought and morale. Further research and understand of musical instruments in ritual and ceremony in Thailand must be undertaken in conjunction with research of relationship between musical instruments, ritual and ceremony in Indian cultural history. The chapters in brief are outlined below.

Chapter I : Introduction

This chapter deals with the general geography of India, Thailand and countries in Southeast Asia, with the aim and problem envisaged Indian colonization being one of the reasons of cross-cultural relations between India and Thailand, it also includes the spread of Indian civilization into Thailand and neighbouring countries. The method of work and sources of information are also described here.

Chapter II :Musical instruments from Archaeological Sources in Thailand.

Present the scene of Thai musical instruments from archaeological point of view. The chapter describes the details of archaeological sources such as long stone asze. Lintels, cave painting, sculptural reliefs, stuccos, coins and other antiquities present and excavated which depicts or reveal the musical instruments such as lithophone, cymbals, conch, different types of *vīṇās* and drums. Apart from this the musical instruments are variously categorized here. Even there is a need to examine the following aspect : musical instruments, which are sometimes not depict in archaeological sources like inscriptions, sculptures, monuments and not even in written documents but it has been in societies by oral traditions, and folk lores.

Chapter III : Analysis of Music and Indian Influence on it Based on Inscriptional Evidences from Thailand

This chapter describes literary sources which were found in Thailand, analysis of music in inscriptions and also discussion of music culture represented through musical instruments. The evidences that have shown the influence of Indian civilization in Thailand and Southeast Asia, and the way music was used in ritual ceremonies and social life. Moreover, this chapter takes a brief look at ethnomusicology.

Chapter IV : Comparative Study of Musical Instruments of Southeast Asia and India

Various evidences from archaeological and other related sources for comparative study are described here. Chapter IV will show Indianized states in Southeast Asia and the characteristics of musical instruments. Furthermore, analytical and interpretative study is also included here.

Chapter V : Conclusion

This chapter aims to bring out the history of Thai musical instruments based on archaeological and other related sources from the ancient to medieval period in Indian context. The evidences which found in Thailand had shown the influences of Indian civilization on Thai culture. The research indicate that the Indian civilization which reached Thailand emanating from different part of India through Myanmar, Indonesia, Cambodia and other countries at the same time.

Statement

(Statement showing the particulars on which the work is based, the discovery of new facts and of new relationships between the facts observed by others and how the work tends to help the general advancement of knowledge).

The present work is undertaken to study Thai musical instruments from historical and archaeological evidences provides example of the culture of music in political, social and cultural life; religious thought and morale. The study of Thai musical instruments is very useful to understand the history of Thai music. None of Thai scholars work about history of Thai musical instruments from the ancient time. The influence of India on Thai music was uncertain and needed proof, including the study of cross-cultural exchange between India, Thailand and countries in Southeast Asia.

The study has revealed the following facts :

1. The author has dealt with this subject for the first time and claims originality on it.
2. The Inscriptions and literary sources were studied in detail to establish the religious, political, social and cultural life. The author however limits the study to the evidences upto 11th century A.D., only. The reason being the extension of Cambodian empire to Thailand after 11th century which put an end to Indian monopoly.
3. Through the reports of Thai excavation and exploration, the author has brought to light the fact that the musical instruments were used in Thailand from pre-historic period onwards.

4. The influence of Indian civilization in Thai territory in order to trace the religious practice, artistic works, music culture in different Indianized kingdoms which flourished before the 11th century A.D.
5. The author has brought to light that Indian music started influencing Thai music from the first century A.D.
6. It is for the first time a study of archaeological, historical, literary and other related sources in India and Thailand was taken up to base the comparative study of musical instruments from the ancient up to medieval period.
7. It is for the first time a detail study of history of Thai musical instruments in Indian context was undertaken.
8. The comparative study of music between Thailand and India has clearly shown the fact that Indian music and religious beliefs have influenced musical instruments found in Thailand. Certain distinguished instruments found to be used till present without any change are conch, *ḍamarū*, *vīṇā* and cymbals.
9. The same evidences and similar forms of these instruments which show the style of Indian arts are found in Southeast Asian countries as Myanmar, Indonesia, Cambodia and Champa.

10. The relationship between humans and music was concerned a lot with religion. Buddhism (the principle religion in Thailand) used music for celebrations or entertainment while the music in Hinduism is a part of living and goes along with the religion and traditions.

Statement II

(Statement showing the sources of information, the extent to which the thesis is based on the works of others and the original portion of the thesis).

The sources material in this work is drawn from archaeological and literary sources in Thailand and India. Reports from archaeological surveys, excavation reports and research papers on inscriptions belonging to both India and Thailand were studied thoroughly. Besides these, articles dealing with sculptures, temples, coins, miniature paintings etc., by previous scholars were also studied. However the thesis is mainly based upon the data, collected by the author. The field work carried out at various places in India such as Ajanta, Ellora, Sanchi, and Elephanta help in understanding the background of cultures.

A list of selected references are appended herewith.

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Chapter I

Introduction

Music is an important aspect of culture and traditions of a country. In Thailand, various cultures have contributed to the development of musical instruments. India, having brought civilization to the region of Thailand, or Southeast Asia in general, obviously has made a significant contribution in this aspect of culture. This study aims at bringing out the background of role and influence of Indian musical instruments on that of Thailand.

However, Thai people appeared on the historical scene after the 11th century A.D. The formation of the present Thai Kingdom was only on a start when the Hindu and Buddhist civilization had passed their prime. The Indian civilization reached Thai people indirectly through the Mon, the Khmer and the Javanese Kingdom which flourished in the Thai territory before the settlement of the Thai in this land on one side. These kingdoms were a part of Indianization that the whole Southeast Asian region underwent, right from the dawn of the Christian Era. The cultural development of the region was a product of Indian impact and interaction among the peoples of the kingdoms. Due to homogeneity in evolution of these cultures, the whole region is considered a single unit. Hence, to study a particular aspect of the culture like the musical instruments, the history of the complete region must be taken into account; the forces that brought about the process of Indianization, its successive advancement, the origin, nature and area of impact, and the interaction among the kingdoms

of Southeast Asia. Beginning with geography and history in short, the following attempts to describe these.

1. Geography

Broadly speaking Southeast Asia comprises Vietnam, Laos, Cambodia, Thailand, Myanmar, Malaysia and the Indonesian archipelago. Also called Indo-China, the mainland is shut off by high mountains from India and China. It is transversed by long ranges of hills and mighty rivers, both running north to south. The hill ranges divide the entire country into four distinct regions, viz. 1. Myanmar and 2. Thailand and Malay Peninsula in the west; 3. Vietnam in the east; and 4. Laos and Cambodia in the middle. The mighty rivers which drain the lands are the Irrawaddy and the Salween in Myanmar, the Menam or Chao Phraya in Thailand, the Mekong in the central region, and the Red River in Vietnam. Most of Southeast Asia has a stable, homogeneous tropical climate. Its large, shallow archipelagic seas and extensive fringing bays help stabilize the region's average monthly temperatures at around 81° F (27° C)¹.

2. A Brief History of Indianized Southeast Asia

a) Routes of Expansion

The spread of Indian civilization to Southeast Asia is regarded by scholars as a result of trade which was followed by Indian settlement or migration. Though not widespread the first traces of Indianization

dates back around first century A.D. The contact between India and the people of this region might have however begun since prehistoric time. There are vague references in the *Rāmāyaṇa*, the *Purāṇas* and the *Jātakas* about *Yāvadvīpa*, *Malayadvīpa* and *Suvarṇabhūmi* belonging to this region².

The sea route were effective means of communication between India and Southeast Asia during the past. Coromandel coast in the south had ports of call like Mamallapuram and Mayilai of the Pallavas, Nagapattinam, Maculipattinam etc. Those seamen who, proceeding from here did not coast along the shores of Bengal but risked crossing the high seas were able to make use of either the 10 degree channel between Nicobar and the headland of Achin. In the first case they would land on the peninsula near Takuapa; in the second, near Kedah. Archaeological research has uncovered ancient objects at these two sites³. From central India the ships proceeded from Tamralipti (Tamluk on the mouth of the Ganges) and Palura in Orissa, along the coast of Bengal and Burma, or crossed the Bay of Bengal and made a direct voyage to Malay Peninsula and to the East Indies and Indo-China beyond it⁴. One passes without difficulty from Kedah to Singora; from Trang to Phattalung, to the ancient Ligor, or to Bandon; from Kra to Chumpon; and especially from Takuapa to Chaiya. The importance and antiquity of these routes have been revealed by archaeological research⁵. It was also possible to cross Gulf of Siam starting from eastern coast of Malay Peninsula to reach the southern ports of present day Thailand and Cambodia. (Map 1)

Still farther north, there was a route connecting India and China through Assam, Upper Myanmar, and Yunnan. There is clear evidence that this route was used from the beginning of the second century A.D., and its use probably dates back to the second century B.C. By this route Indian influence, after affecting Upper Myanmar, reached Nanchao. It must be noted here that it was not only Indian traders and settlers who played a role in bringing Indian civilization to Southeast Asia but also the natives who took up trade with India. As Coedès said⁶, "The activity of the natives of Southeast Asia who, on returning from a sojourn abroad, must have contributed a great deal to the spread of Indian customs and beliefs in their countries." This was aided by similarity in Indian polytheistic Hinduism and the cults practised by the aborigines. Especially the custom associated with the original foundation of a kingdom or royal dynasty, is witnessed in all the Indian kingdoms of the Indochinese Peninsula. It reconciled the native cult of spirits on the heights with the Indian concept of royalty, and gave the population, assembled under one sovereign, a sort of national god, intimately associated with the monarchy. Through this Indianization were born series of kingdoms which occupied different parts of the Southeast Asian region at different times and had Brahminical Hinduism and Buddhism as major religions.

b) Funan

Earliest of these kingdoms were Funan (first century A.D.) and Champa (the end of the second century A.D.). The Chinese account says that an Indian Brahmin prince named Kaundinya arrived in Funan from the

south by sea, and married the local chieftainess, named 'Willow-leaf' after subduing her people. But Funan's earliest record is the rock inscription of Vocanh, a Buddhist document in Sanskrit and a south Indian script, belonging to the first half of the third century. Funan was certainly a most important center of Indian rule and influence. Starting from a settlement on the southern tip of present Cochin-China, it moved to the delta of the Mekong river and extended gradually over the present Cambodia and Annam, along the valley of the Menam river, and down into the Malay Peninsula. Its capital for a time was Vyadhapura which was situated in the vicinity of the hill of Ba Phnom and of the village of Banam⁷. For five hundred years it was the dominant power of the Indo-Chinese peninsula and by far the most important Indianized state in Southeast Asia.

One of the kings of Funan named Fan Chan between 225 - 250 A.D. sent an ambassador to India. It was then Funan entered into relations with the Indian dynasty of the Murundas. In 357 A.D. Funan fell into domination of a foreigner. His name according to Chinese sources was Chan-Tan which is a transcription of Chandan, a royal title in use among the Kushans in the line of Kanishka. This is believed to be due to the conquests of emperor Samudragupta in the Ganges Valley and southern India which provoked a new exodus to the east that resulted not only in the coming to power of the Indo-Scythian in Funan but also in a general resurgence of Indianization abroad in which southern India, especially the region dominated by the Pallavas of Kanchi, seems to have played a preponderant role. This episode was perhaps merely the prelude to a more general movement which, from the middle of the fourth century to the

middle of the fifth, brought princes, Brahmans, and scholars to the peninsula and islands, which were already Indianized and in regular contact with India. These Indians were responsible for the introduction of Sanskrit epigraphy in Champa, then in Borneo and Java.

The reign of Jayavarman (C. 480 - 514 A.D.) marked for Funan an epoch of grandeur. Rudravarman(514 - 550 A.D.) who succeeded him was the last king of Funan. It is assumed that the irregularity of the succession of Rudravarman to the throne provoked in the provinces of the middle Mekong a movement of unrest, that resulted in the dismemberment of Funan in the second half of the sixth century. For a long time after its fall, it retained much prestige in the memories of following generations. The kings of pre-Angkorian Cambodia adopted its dynastic legend, those who reigned at Angkor strove to relate their origin to the *Adhirājas*, or supreme kings, of Vyadhapura⁸. And the Javanese sovereigns of the eighth century revived the title Sailendra, “king of the mountain”.

The two Kaundinyas who Indianized the country were Brahmans; they stayed to implant Shivaite rites, which certainly flourished in the fifth century. Vaishnavism was also practised around the same time. Finally Theravada Buddhism that used the Sanskrit language of which there are evidences from the third century flourished in the fifth and sixth century during the reigns of Jayavarman and Rudravarman. Regarding the arts, the pre-Angkorian images of Vishnu shows Pallava influence. The statues of Buddha are in Gupta style. It can be concluded that this kingdoms was influenced both by south and east India.

Around the end of Funan empire there were a number of kingdoms on Malay Peninsula namely P'an P'an, Langkasuka, Kedah etc., in various stages of Indianization. The influence on art and society of these kingdoms were similar to those of Funan. Malay Peninsula being in the middle of the mainland and the Indonesian archipelagos served, in effect, as relay station between India proper and the rest of farther India.

c) Champa

Lin-Yi the first center of Cham country of Champa enters into history at the end of second century. In fact, a Chinese text places its foundation about the year 192 A.D.⁹ With some exception to the north, the kingdom of Champa comprised the present state of Vietnam. It is a long narrow strip of territory, confined between the mountains on the west and the sea in the east, and intersected by innumerable spurs of hills. As the country was cut off from the rest of the mainland kingdoms by the mountain ranges in the west, it would suffice to note only a few highlights indicating interaction with the rest of Southeast Asia through sea route or some passes in the south.

In the beginning kings of Champa concentrated on expansion of their kingdom especially in the north. Some inscriptions show that in the eighth century Cham was spoken in the southern province. But originally these southern provinces were part of Funan. The beautiful bronze Buddha found at Dong-Duong is evidence of the antiquity of Indian penetration in this region which bore the name of Amaravati. South of Amaravati, the

principal centers were Vijaya, Kauthara and Panduranga¹⁰. Bhadravarman (third quarter of the fourth century) was the founder of the first sanctuary constructed in the cirque of Mi-son and dedicated to Shiva *Bhadreśvara*. The inscriptions of Bhadravarman are the first documents dealing with the religion of the court. They reveal "The dominance of the cult of Shiva-Uma, without prejudice to the homage rendered to the two other members of the *Trimūrti*."¹¹ Later inscription found at Mi-son show us that the god *Bhadreśvara* was represented by a *linga*. It is the oldest known royal *linga*¹² in Farther India. Around the last quarter of the fifth century a vassal of king Jayavarman of Funan usurped the throne of Champa. In circa 625 A.D. minister Simhadeva from Cambodia was sent by Mahendravarman to establish friendly relations with Champa. Continuing the policy of his father, Isanavarman maintained good relations with Champa - relations were sealed by a matrimonial alliance between the two royal houses. Many of the buildings dating around middle of seventh century show the existence in Champa at this time of a cult of Vishnu. In 774 and 787 A.D. Champa was subjected to Javanese raid. Indravarman II, in 875 A.D. had constructed a great Buddhist monument that is the first evidence of the existence of Mahayana Buddhism in Champa: this was the monastery of Lakshmindralokesvara of Dong-duong southeast of Mi-son. Po Klung Pili Rajadvara a high official in royal court went on a pilgrimage to Java (899 - 903 A.D.). This was the beginning of the Javanese influence on Cham Art that is found in this period at Khuong-my and at Mi-son. Champa never ceased to be subjected to the increasingly strong pressure of its neighbour to the north, and from 11th century A.D., inspite of some

revivals, the history of Champa was to be no more than the history of the retreat of Indian civilization before that of China.

The temples of Champa show influence of Dravidian style of the seventh century Mamallapuram *Raths* and the temples at Kanjeeveram and Badami¹³. The bronze Buddha of Dong-duong discovered in Quang-nam is in Gupta style. Few other temples (*Rath*) are also believed to be derived from those of north Indian style. Here it is worth noting that as Champa was nearest by way of sea to south India, the influence of this part of India was predominant.

d) Dvaravati

From the fall of Funan were born Khmer kingdom of Chenla; Mon kingdom of Dvaravati and Pyu kingdom of Srikshetra. Out of these Dvaravati is the most important kingdom as it occupied large part of present day Thailand. The existence of this kingdom was recorded in the Chinese chronicle by Hiuen Tsang (a Chinese pilgrim who was on his way to study Buddhism in India in the middle of seventh century). Due to the lack of evidences not much information about the events of this kingdom are available. However, from excavation and exploration conducted by both European and Thai scholars following information about Dvaravati was obtained.

Dvaravati covered the central part of Thailand, including Nakorn Pathom, U-Thong (Supanburi), Ratburi, Ayudhya, Prachinburi,

Kanchanaburi and Petchburi. The capital of the Dvaravati kingdom is still unknown. However, Nakorn Pathom and U-Thong are focused by archaeologists to be the center of Dvaravati kingdom as a large number of antiquities of this period are found from both sites. The inscriptions of Phra Pathom and of Lopburi, in archaic Mon language¹⁴, prove that the populations was basically Mon¹⁵. The Dvaravati Buddha images indicate the influences of those of the Gupta and Post Gupta style which flourished in central and western India in fourth-eighth century. It is certain that there was a direct contact between the Indians and people of this kingdom during that time. This hypothesis is well supported by the discoveries of two silver medals inscribed with the Sanskrit's word "*Śrīdvārāvatīśvarapūṇya*" found at Nern Hin, west of Pra Pathom Chediya. Apart from Theravada Buddhism, Sanskrit Hinayana Buddhism may have flourished for sometimes within Dvaravati kingdom during the sixth and seventh century. Moreover, Mahayana Buddhism is also believed to have flourished for sometimes, as many terracotta figures found from stupa No. 40. at Ku Bua (Ratburi) were identified as figures close to the tradition of Ajanta and most of them were Mahayanist Bodhisattavas. A rough figure of Vishnu sculptured in high relief on a stele had been found near U-Thong related to the Pallava style, image of *Ardhanārīśvara*, representing Shiva and Uma his consort mingled together into one, found in the province of Ubon Ratchathani, northeastern Thailand and many *Shivalingas* discovered at Dong Sri Maha Pot in the province of Prachinburi, northeastern Thailand show that Vaisnavism and Saivism were also practised.

Dvaravati kingdom had its dominion not only in the central part of Thailand, but also in the northeast e.g. in Korat and Buriram because many typical Dvaravati Buddha images were found there. It was in the middle of the eighth century that the inhabitants of the town of Lavo (Lopburi) migrated to the north and settle down at Haripunjaya (Lampun). They brought with them the Dvaravati civilization which continued to flourish there until it was conquered by the Thai of the Sukhothai kingdom in the late 13th century. According to the inscription found at Prasat Beng Vien, King Rajendravarman of Cambodia, who ruled from 944-968 A.D. invaded Dvaravati and overpowered it. There are archaeological evidences from Prachinburi and other places which point to extension of Khmer, to the western region. The name of the country Dvaravati is preserved in the official names of the Siamese capitals Ayutthaya¹⁶. And important evidence concerning this research comes from Dvaravati.

e) Myanmar

About the region of Myanmar, in the third century the Chinese had entered into contact via Yunnan. They recorded kingdom of Piao (Pyu) which corresponded roughly with Irrawaddy basin. The Pyu tribe which constituted the vanguard of the Tibeto-Burman migration and called itself Tichul¹⁷, occupied the region around Prome. The ancient sites surrounding this town have yielded fragments of texts extracted from the Pali canon written in a script that dates back to around the year 500 A.D.¹⁸ These documents prove the existence of a Buddhist colony of southern origin in a region which the Chinese pilgrims of the seventh century A.D.

called Srikshetra and in which a dynasty of kings bearing Sanskrit names reigned in the eighth century. The capital of the Pyus is represented by the archaeological site of Moza near Prome.¹⁹ It is believed that the Buddhist monuments of Prome where ruins bear the names of Bobogyi, Payama, and Payagyi were built during the eighth century. The origin of this type of stupa is to be sought in northeast India and on the coast of Orissa. In lower Myanmar there were colonies of Indians who had come from Orissa. Of these colonies the principal one was Sudhammavati that is Thaton²⁰.

Theravada Buddhism was witnessed at Prome before the seventh century in the fragments of the Pali canon previously mentioned²¹. But farther north, at Pagan, Mahayana Buddhism was already firmly established and had assumed, under the influence of Bengal, an aspect that is sometime, said to be Tantric²². The Buddhist images found at Moza are in the late Gupta style. There must have been sufficient contact between Srikshetra and Dvaravati which could be seen in the similarity of the numismatic remains and the votive tablets found in both places.

The establishment in the first half of the eighth century A.D. of the kingdom of Nanchao²³, which occupied the west and northwest of Yunnan, had serious consequences for the Pyu kingdom of Myanmar. The second king of Nanchao Ko-lo-feng between 757-763 A.D. conquered the upper Irrawaddy Valley²⁴. Capital of the Pyus remained at Prome was perhaps transferred farther north, to Ha-lin²⁵; but few facts have been established for this period of Myanmar history.

During the entire first half of the ninth century, Nanchao was master of Upper Myanmar. In 832 A.D., it abducted three thousand Pyus from the population of the capital Ha-lin to populate the eastern capital of Nanchao, Cha-Tung, which corresponds to the modern Yunnan-fu (K'un-ming). This was the beginning of the Pyu decline. The depopulation of Prome profited Pagan (Arimaddanapura), a city formed by the union of several villages, well situated close to the confluence of the Irrawaddy and the Chindwin, at the crossroads of the routes leading to Assam, Yunnan, and the region occupied today by the Shan states²⁶. This was also the place where the Burmese entered into contact with the Mons, who were established there in considerable numbers. The Mons taught them their script and introduced them to the religions of India. In 849, Pagan entered into history with the construction of its city walls by the king Pyinbya. According to native chronicles Pagan began as a group of nineteen villages, each possessing its 'Nat', or local spirit. The legend of Nat is interesting because it shows the establishment of a cult of a spirit on a mountain in order to achieve religious and territorial unification and the birth of a nation²⁷.

Among the vassal states of Pyu the kingdom of Mi-ch'en was a victim of Nanchao aggression in 835 A.D. It is believed that Mi-ch'en must have been situated on the Gulf of Martaban, perhaps in the region of old Pegu²⁸. In this period, the center of gravity of the kingdom of Ramanadesa, that is, the Mon country²⁹, shifted to the west : a chronicle gives 825 A.D. as the date for the foundation of Pegu (Hamsavati) by Samala and Vimala, twin brothers from Thaton³⁰. The Brahmanic remains in lower Myanmar proves that before this period Buddhism was not the

dominant religion. The conversion of the heretic king Tissa to Buddhism was to be accomplished by the queen who originally came from Martaban³¹.

In the 10th century A.D., Pagan and Pegu continued to flourish. In the year 1044³² the great king Anôratha (Aniruddha) came to throne of Pagan. He increased the territory of the kingdom. Lower Myanmar, that is, the Mon country, was one of the earliest countries converted to Buddhism³³. But numerous vestiges of Hinduism have also been found in this country, and they prove that Buddhism was not the only religion known there. When Buddhism began to decline in India, the Mons maintained spiritual contact with southern India (Kanchi). In 1056 A.D., the monk Shin Araham³⁴, son of a Brahman of Thaton and a disciple of the Kanchi school, came to Pagan and won the king over to Buddhism. Desiring to obtain a collection of the sacred writings of the Pail canon, Anoratha sent one of his ministers to Thaton³⁵. His request was refused by king Makuta. Anoratha then organized an expedition against his uncooperative neighbour and in 1057, after a three months siege, he took the city of Thaton. The political result of the conquest of Thaton was the submission of the whole delta and its Indian principalities³⁶ thus opening a window on the sea for the Burmese; the cultural result was the conversion of Pagan to Theravada Buddhism and the decline of Tantric Mahayana. The numerous prisoners brought back from Thaton taught the Burmese their literature, their Art, and their script. Two of the most ancient monuments of Pagan, Nan-paya and Manuha, were built by the captive king Makuta around 1060³⁷. Anoratha was a great conqueror, to the west, he conquered the north of Arakan and

seems to have pushed on to Chittagong³⁸. In the direction of Cambodia, the chronicles of the Thai principalities of the upper Menam attribute a campaign to him.

Anoratha died in 1077 in a hunting accident. He left a kingdom that extended from Bhamo to the Gulf of Martaban, embracing northern Arakan and the north of Tenasserim, and was defended by a series of fortified cities; a kingdom that had been won over to Theravada Buddhism and refined from the artistic and cultural point of view by Mon influence; a kingdom that was capable of playing the role of a great power on the Indo-Chinese Peninsula.

F) Indonesia

In Borneo, the seven inscriptions on pillars found in the sultanate of Kutei seem to date back to around 400 A.D.³⁹. They emanate from king Mulavarman. These inscriptions are associated with a sanctuary bearing the name Vaprakesvara, in which must be recognized Shiva or Agastya or a local divinity. Furthermore, there are scattered Kapuhas Rata, and Mahakam rivers- more or less clear traces of Indianization. A beautiful bronze Buddha of Gupta style has been found at kota Bangun⁴⁰ in the province of Kutei. Aside from the inscriptions already mentioned, Kutei has yielded some Brahmanic and Buddhist images of undetermined date in a grotto of Mount Kombeng and in an estuary of the Rata river.

(i) Java

The Island of Java is probably mentioned in the *Rāmāyaṇa* (*Yāvadvipa*) and in Ptolemy ⁴¹ (Iabadiou). In Java, aside from the Buddha of Gupta style found in the east, the oldest traces of Indian penetration are the four stone inscriptions (450 A.D.) discovered in the westernmost part of the island, that is, the region commanding the Sunda Strait. The geographical position of the Batavian coast with regard to the continent of India and Sumatra and the special advantages its configuration offers to shipping and trade are circumstances which will easily account for the early settlement and eventually the presence of the above mentioned inscriptions in the region. The inscriptions reveal that Purnavarman King of Taruma who talks about his father and grand-father without naming them, observed Brahminic rites and was engrossed in irrigation works in his kingdom.

After enormous gap in documentation we come to know about Ho-ling (perhaps Walaing), around 640 A.D. ⁴² located in the center of Java from Chinese sources. The archaeological remains of this period are quite rare. Ho-ling was a center of Buddhist culture in the seventh century. It was the homeland of the monk Jñānabhadra, under whose direction the Chinese pilgrim Hui-ning, who came to the country in 664-665 A.D., translated the Sanskrit texts of the Theravada into Chinese ⁴³.

Sanskrit inscription of 732 A.D. found in the central part of island among the ruins of the Saivite sanctuary of Changal on the hill of Wukir was authored by king Sanjaya. The inscription tells of the erection of a

linga on the Island of Java, in the country of Kunjarakunja. A late text credits Sanjaya with incredible conquest in Bali, in Sumatra and in Cambodia upto China. An inscription dated 907 A.D. represents Sanjaya as a prince of Mataram (southern part of central Java) and as the first of a line. According to an inscription of Kalasan, the second in this line, Panangkaran, reigned in 778, under the suzerainty of the Śailendra dynasty (which ruled in central Java).⁴⁴

The name Śailendra, “king of the mountain” is an equivalent of (Shiva) *Giriśa*, and perhaps expresses an Indian adaptation of Indonesian beliefs which place the residences of gods on mountains. The appearance in the southern islands of the Śailendras, with their imperial title *mahārāja*, was an international event of major importance.⁴⁵ The dynasty increasingly assumed the aspect of a suzerian power, exercising its supreme authority over the local dynasty governing the Kedu Plain. The coming of the Śailendras was marked by an abrupt rise of Mahayana Buddhism. In 782, during the reign of a Śailendra king known as Sangramadhananjaya,⁴⁶ a teacher from the country of Gaudi (Western Bengal) named Kumaraghosha consecrated in Kelurak, an image of the *Bodhisattava Manjuśrī*. The temporary vogue for the script of northern Indian which was used in the inscription of Kalasan and Kelurak, and later in Cambodia⁴⁷, was apparently owing to this influence of western Bengal and the university of Nalanda.

It was at the beginning of the establishments of the Śailendras in Java, roughly in the second half of the eighth century A.D., that the great

Buddhist monuments of the Kedu Plain were built; Kalasan, temple of Tara, dated 778, Chandi Sari, a monastic dwelling provided with a sanctuary, and Chandi Sewu, with its 250 little temples, a veritable stone *maṇḍala*, a bit later⁴⁸. The most dazzling of these monuments, the Borobudur-together with its subordinate structures, chandi Mendut and Chandi Pawon were constructed after the middle of ninth century that is, at the end of the Śailendras. The Borobudur, which is decorated with bas-reliefs illustrating some of the great texts of Mahayana Buddhism⁴⁹, is a Buddhist microcosm, another stone *maṇḍala*, and it is perhaps also the dynastic temple of Śailendra. Chandi Mendut shelters a magnificent triad, the Buddha preaching between two *Bodhisattavas* executed in post-Gupta style.

In the second half of the ninth century A.D. Java and Sumatra were united under the rule of Śailendra reigning in Java. On the other hand, the Śailendras may have had some claim over Cambodia in the eighth century, for in the following section about Cambodia we will see the founder of Angkorian royalty inaugurate his reign with a ceremony designed to completely liberate him from Vassalage to Java. The Śailendras of Java did indeed take advantage of the weakness of Cambodia during its disunity to assert over it the rights of its ancient masters, the 'kings of mountain'.

The decline of the power of the Buddhist Śailendras in the central Java is indicated by the presence near Prambanam of Saivite inscription of 863 A.D.⁵⁰ The fall of Sailendras led to the establishment of kingdom of Mataram ruled by the Hindu Sanjaya. The kingdom encompassed central and eastern Java. A king named Daksha of Mataram (913 A.D.) is

believed to have built the monument of Loro Jonggrang at Prambanan. The rise of Hindu dynasty did not mark the end of Buddhism but there are numerous indications that the reciprocal tolerance between Buddhism and Hinduism, and in some cases the syncretism of the two, was as marked in Java as in Cambodia ⁵¹.

There were constant discord between Javanese and Sumatran kingdoms for the western part of Java. The shift of capital by Sindok to the east in around 942 A.D. resulted in new incursion of Śrīvijaya in the west of the island. Around 990 A.D. Dharmavamsa inaugurated aggressive policy against Śrīvijaya, to this Śrīvijaya, took striking revenge in 1016 A.D. The avenging aggression divided the Javanese kingdom into several parts. The restoration of Java thereafter was the work of the great king Airlanga (1016-49) who was originally from Bali but related to the Sanjayas. The restoration of Java however, coincided with the temporary weakening of the Sumatran kingdom following the Chola raid of 1025 A.D.⁵². Following his victory Airlanga founded the monastery of Puchangan in the delta of the Brantas. In 1035 there was reapproachment between the two rivals following the weakening of Śrīvijaya and coming to power of Airlanga. However, Śrīvijaya maintained political supremacy in the west of archipelago and Java in the east. Contemporary documents show that the commercial relation of Java extended to the west with : Indians of Kalinga, non-Dravidian Indians, Gauda of Bengal, Singhalese, Karnataka, Cholas of Coromandel, Malabaras, Pandyas and Keras, Tamils, Chams, Mons or Malays of Ramni, i.e. Achin, and Khmers who must have

arrived in the states of Airlanga by the ports situated at the mouth of the Brantas in the bay of Surabaya and, farther north, around Tuban.

Before his death (1049), Airlanga divided his kingdom into two parts, the more powerful of which was Kadiri which occupied all the ports of the coasts and was so representative of Java. The composition by Trigana of the Krishnayana, an epic poem dealing with the legend of Krishna depicted in the bas - reliefs of Chandi Jago and Panataran, date a little after this.⁵³.

(ii) Śrīvijaya

In Sumatra, as in Java and the Celebes, the most ancient Indian archaeological vestige is a statue of Buddha in Amaravati style. It was found west of Palembang in the vicinity of the hill Seguntang. The presence of this statue of the Buddha in Palembang is proof of the antiquity of the Indian penetration in the country. Kan-t'o-li, first mentioned in the *'History of the Liang'* in the middle of the fifth century, is located in Sumatra. It presumably preceded Śrīvijaya and may have had its center of Jambi.

In 644-45 A.D., the *New history of the T'ang* mentions of Mo-lo-yu. This name refers to the country of Malayu situated on the east coast of Sumatra and centered in the region of Jambi. The pilgrim I-Ching stopped off there for a time in 671. He informs us in his memoirs that between 689 and 692 Malayu was absorbed by Shih-li-fo-shih (Śrīvijaya)⁵⁴.

The development of navigation, inevitably gave a special importance to the Southeast coast of Sumatra, whose outlines then differed appreciably from those of today⁵⁵. Since this coast was situated at equal distance from the Sunda Strait and the Strait of Malacca, the two great breaks in the natural barrier formed by the Malay Peninsula and Indonesia, it was the normal point of landfall for boats coming from China on the northeast monsoon. Moreover, the fall in the early seventh century of Funan, a state that had been the dominant power the southern seas for five centuries left the field open for the inhabitants around Sumatran estuaries and harbor to develop control of commerce between India and China. It was thanks to these circumstances that the rapid rise of the kingdom of Śrīvijaya took place in the eighth century.

Śrīvijayan expansion northwest toward the Strait of Malacca and southeast toward the Sunda Strait was a very clear indication of its designs on the two great passages between the Indian Ocean and the China Sea, the possession of which was to assure Śrīvijaya of commercial hegemony in Indonesia for several centuries⁵⁶. The inscription of 684, the first dated evidence of Mahayana Buddhist in Farther India, confirms what I-Ching said about the importance of Śrīvijaya as a Buddhist center⁵⁷ and about the various Buddhist school in the southern seas. He asserts, it is true, that the *Mūlasarvāstivāda*, one of the great sects of the Theravada Buddhism that used the Sanskrit language⁵⁸, was almost universally adopted there, but he mentions followers of Mahayana Buddhism at Malayu⁵⁹. A Sanskrit inscription (775 A.D.) engraved on the first face of the stele of Wat Sema Muang reveals that the Sumatran kingdom had established a foothold on the

Malay Peninsula at Ligor, where a king of Śrīvijaya, probably named Dharmasetu, had built various edifices, including a sanctuary dedicated to the Buddha and to the *Bodhisattavas Padmapāṇi* and *Vajrapāṇi*.

Balaputra a prince of Java after a conflict with his brother-in-law Pikatan moved to Śrīvijaya (his mother's country) and became king there. This Balaputra was the first Śailendra sovereign of Śrīvijaya. He had a monastery built in India at Nalanda⁶⁰, to which the king Devapala, in the thirty-ninth year of his reign (ca.860)⁶¹, offered many villages. The decline of power of Śailendra at the central of Java resulted in strengthening of the power of the Śailendras in Sumatra.

From the accounts of Arabo-Persian merchants around 916⁶² we get affirmation that the king of Śrīvijaya ruled simultaneously over Kalah and Sumatra. To preserve their monopoly the kings of Śrīvijaya must have neutralized their rivals or made vassals of them; this was necessary in order to maintain the upperhand over the commerce of the Straits and make their influence felt on both shores. After having become a great economic power, however, Śrīvijaya seems to have neglected the spiritual values that attracted the Chinese pilgrim I-Ching there in the seventh century. In fact, while the Javanese kings were covering their Island with religious buildings the Śrīvijayan sovereigns were preoccupied with superintending the traffic of the straits rather than with building lasting monuments, and they have left us only insignificant brick towers and a very small number of inscriptions.

In 990, as mentioned earlier, Śrīvijaya was subjected to Javanese invasion and requested protection from China. Around 1005, the king of Śrīvijaya, following the example of his predecessor Balaputra, had a Buddhist temple bearing his name, the Chulamanivarmavihara⁶³, built at Nagipattana (Negapatam, on the Coromandel coast). The Chola Rajaraja I, offered the revenues of a large village to this temple. However, in 1025 Chola king attacked Malay Peninsula and Sumatran archipelago including Śrīvijaya. The expedition of Rajendrachola I, seems not to have had lasting political consequences. At most the capture of the reigning king resulted in the accession of a new king. Nevertheless, the shock felt by Śrīvijaya led it to come to terms with its old rival Java, which was even sealed by a matrimonial alliance.

In 1068, there was a new aggression of the Cholas against the Malay Peninsula. This was a result of king of Śrīvijaya making an appeal for assistance from Virarajendra to repress a revolt or an attempt at succession on the peninsula. An inscription in Tamil dated 1088 found near Baros on the west coast of the island shows relations between Sumatra and southern India.

In sum, the growth of navigation and trading made Śrīvijaya a powerful state. Its possession on the Malay Peninsula corresponds to present day Malaysia and southern Thailand. They had strong relation with south and east India. The coming to power of Pala dynasty in India around the eighth century and under the teachers of the university of Nalanda

Mahayana Buddhism established a definite foothold on the Peninsula and the archipelago.

G) Khmer

(i) Chenla (Pre-Angkor)

Around the middle of the sixth century, a king of Chenla (which was before that to the southeast of Funan and southwest of Lin-yi), seized Funan and subdued it. It was originally a vassal kingdom of Funan. The king Chitrasena was himself a prince of Funan and later he and his successors claimed to be the descendants of Rudravarman, the last king of Funan. Judging by inscriptions Chitrasena (later Mahendravarman), pushed his conquest at least upto kratie on the Mekong to Buriram between the Mun River and the Dangrek Mountains, and to Mongkolborei west of the Great Lake.

Chitrasena, had short Sanskrit inscription engraved telling of the erection of *lingas* along the Mekong, in the regions of Kratie and Stung Treng, and to the west of Buriram between the Mun River and the Dangrek Mountains⁶⁴. He also sent an ambassador to Champa to “ensure friendship between the two countries”. His successor Isanavarman, expanded his kingdom to the provinces of Kompong Cham, Prei Veng, Kandal, Takea and to the west upto Chanthabun. In inscription of Jayavarman I, who reigned around 657 A.D. it is found that the area of his kingdom extended from Vat Ph’u in the north to the Gulf of Siam in the south; he built

structures in the region of Vyadhapura (Ba Phnom) and at the old sanctuary of Lingaparvata at Vat Ph'u⁶⁵.

The major Hindu sects seems to have co-existed in Cambodia as in India proper, we find the Shivaite sect of the Pasupatas and the Vishnuite sect of the Pancharatras. Both epigraphy and iconography show the importance in seventh century and the following century of cult of Hari-Hara. The cult of Shiva, especially in the form of a linga, enjoyed royal favour and was already almost a state religion. There is little trace of Buddhism - aside from the Buddhas of Gupta style mentioned in connection with Funan - except for a unique inscription naming two Buddhist monks (*bhikshu*). Buddhism seems to be in regression. With regard to social structure, some epigraphy texts show the importance of descent in the maternal line ⁶⁶ which we find again in the Angkor period, with regard to the transmission of offices in many great priestly families. It may have been imported from India, where it is seen among the Nayars and the Nambuthiri Brahmans. Even administration and customs including marriage and funeral were similar to these of India.

In sum, the civilization of pre-Angkorian Cambodia, which was the heir of Funan particularly in matters of agricultural hydraulics and also in religion and art and was influenced in architecture by Champa, assumed in the course of the seventh century a dynamism which enabled it, even after an eclipse in the following century, to dominate the south and center of the peninsula for a long time.

Shortly after 706 Cambodia came to be divided in two⁶⁷ and returned to the anarchic state that had existed before it was unified under the kings of Funan and the first kings of Chenla. The northern half, a land of mountains and valleys, was called Land Chenla. The southern half, bounded by the sea and covered with lakes, was called Water Chenla. The breakup of Cambodia apparently originated in the anarchy that followed the reign of Jayavarman I, who died without a male heir. Not much information is available about the eighth century Cambodia in this state, except that the capital of Land Chela at the end of eighth century was in the region of Pak Hin Bun on the middle Mekong an inscription of 791 found in the province of Siem Reap mentions the erection of an image of *Bodhisattava Lokeśvara* and is the most ancient epigraphical evidence of the existence of Mahayana Buddhism in Cambodia and names of a few kings who ruled in the two regions. As mentioned earlier in case of Java, Cambodia probably fell under suzerainty of the Javanese kingdom. This is of course attributed to the state of disunity and anarchy that Cambodia was under which gave Java a chance to impose itself with a series of maritime raids.

It would be a mistake to believe that at this troubled period in the history of Cambodia there was a corresponding eclipse of Khmer art. On the contrary, art historians agree that some especially interesting works of pre-Angkorian art, intermediate between the style of Sambor Prei Kuk and that of the Kulen⁶⁸ date from the eighth century.

(ii) Angkor

The liberation of Cambodia from the suzerainty of Java was the work of Jayavarman II, founder of the kingdom of Angkor. The family of Jayavarman II, which was linked with the dynasties of the eighth century, took refuge in Java during the disturbances over the succession. Jayavarman II's return from Java, perhaps motivated by the weakening of the Śailendras on the island, took place around 800. The effective beginning of his reign was in 802⁶⁹. The kingdom in the beginning of his rule was divided among many principalities and he had to conquer at least part of the kingdom.

In order to free himself of the Sailendra whose very title conveys the quality of *Mahārāja* or *Chakravartin*, it was necessary that he become one himself. For this the young king took into his services as royal chaplain a Brahman scholar, Shivakaivalya who became the first chief priest of a new cult of the *Devarāja*, or God-King. Hiranyadama a disciple of Shivakaivalya performed a ritual designed to ensure that the country of Kambujas would no longer be dependent on Java and that there would be no more than one sovereign who was *Chakravartin* (universal monarch). In the Indianized kingdoms of Southeast Asia, the Hindu cults developed even further a tendency they had already shown in India and eventually became royal cults. This was particularly true of the worship of Shiva. The essence of royalty, or, as some text says, the 'moi subtil' of the king was supposed

to reside in a *linga* placed on a pyramid in the center of the royal city, which was itself supposed to be the axis of the world. The communion between the king and the god through the medium of a priest took place on the sacred mountain, which could be either natural or artificial. Since the only monument at Phnom Kulen that suggests a pyramid is Krus Preah Aram Rong Chen, it corresponds to the first sanctuary of the *Devarāja*⁷⁰.

Jayavarman II died at Hari-Haralaya (his capital) in 850, after reigning 48 years⁷¹. He received the posthumous name of Paramesvara; this the first definite example of the use of a name indicating deification for a sovereign of Cambodia. Jayavarman II's reign made a profound impression on the country. Although his effective authority undoubtedly did not extend beyond the region of the Great Lake, Jayavarman II began the pacification and unification of the country.

Art during the reign of Jayavarman II, who came from abroad but apparently was anxious to renew his connection with the national traditions, shows the transitions between the art of the pre-Angkor period, to which the king was still closely attached, and that of the Angkor epoch, which owed to him some of its new forms. These forms were particularly influenced by the art of Champa and Java⁷².

Next 50 years saw two major kings named Indravarman and Yasovarman I. Indravarman came to power in 877. He undertook to construct north of the capital the Indratataka, the great artificial lake, which is now dry and in the center of which the monument of Lolei was later

built. The lake served practical as well as ritual purposes. Indravarman set an example for his successors who exercised great care in planning larger and larger reservoirs. In 879, he dedicated the six stucco brick towers of Preah Ko⁷³ to statues of his parents, his maternal grandparents, and Jayavarman II and his wife, deified in the forms of Shiva and *Devī*. His authority extended from the region of Chaudoc, where he dedicated a *vimana* to Shiva in the old sanctuary of Phnom Bayang, to the region northwest of Ubon, from which comes a Buddhist inscription of 886 mentioning him as the reigning king.⁷⁴

Indravarman's son Yasovarman I, in the very year of his accession, 889 had about a hundred monasteries (*āśrama*) built in the various provinces of his kingdom, near ancient sanctuaries or at places of frequent pilgrimage. Each was marked by a stele bearing a Sanskrit inscription in ordinary characters on one face and on the other face the same text in a script of northern India (pre-*Nāgarī*) similar to the script introduced in Java a century earlier. It was also during the reign of Yasovarman that construction was begun on the Saivite temples of *Śikhariśvara* (the Shiva of the summit) at Preah Vihear and of *Bhadreśvara* at Shivapura (Phnom Sandak). The foundation of Yasodharapura, on the site that was to remain the capital of Cambodia until the 15th century, must suffice to illustrate the reign of Yasovarman. His two-script inscriptions cover a vast area, extending from lower Laos in the north to the coast of the Gulf of Siam between the regions of Chantabun and of Hatim in the south. Yasovarman's reign ended around 900⁷⁵.

Little is known about Yasovarman's two sons who succeeded him. The elder, Harshavarman I, who made a donation in 912 in the ancient capital of Funan, was the founder of the little temple-mountain of Baksei Chamkrong at the foot of Phnom Bakheng. At his death around 923⁷⁶, he received the posthumous name Rudraloka. His brother also died shortly afterward, due to which his uncle Jayavarman IV came to power in 928. Jayavarman IV built his new residence on the present-day site of Koh Ker⁷⁷. He decorated this site with monuments of colossal dimension; the most remarkable of these is the great five-stepped pyramid, on the summit of which one still finds the pedestal of the royal *linga Tribhuvaneśvara*, Jayavarman IV died in 941⁷⁸.

In the later years upto the end of the century the Khmer empire had around four kings who mostly built sanctuaries and other monuments. Most of them were sponsored by officials or high-ranking Brahmans. The reign from Indravarman to Jayavarman V, (877-1001), which occupied more than a century, constituted on the whole a period of grandeur. During this stable period of its history, Angkorian civilization, which was to play such an important role in the cultural evolution of the central Indochinese Peninsula and the brilliance of which was to exercise such a great influence on the Thai kingdoms of the Mekong and the Menam, assumed a distinctive form and fixed the characteristics that were to remain its own until its decline in the 14th century.

The inscriptions from the ninth to eleventh centuries tell us mostly about the high clergy of the official religion and the world of the court in so far as their activity was oriented toward the construction of religious edifices. No archives or documents written on hides or palm leaves are extant, and because all Khmer monuments, except for a few bridges, are religious edifices, the inscriptions engraved on these monuments are above all religious in character. Each king who had the time and means built his temple-mountain in the center of his capital, and we have some reason to think that at his death this personal temple became his mausoleum. When he died, the sovereign received a posthumous name indicating the heaven (*svargata*) to which he had gone and the god in whom he had been absorbed.

The offices of chaplain of the king officiating priest of the *Devarāja*, and tutor of the young princes were reserved to members of great priestly families, within which offices were transmitted in the female line, the normal heir being the son of the sister or the younger brother. Khmer names were common among the royal family and even among the priests. The inscriptions emanating from aristocracy, the only literary works that have come down to us, give an idea of the extent of its Sanskrit culture, which must have been renewed from time to time by the arrival of Brahmins from India. In the ninth and tenth centuries, Shivaism predominated. Vaisnavism was also practised and Buddhism always had some adherents.

The major monuments like Temple of Kulen, Roluos, and Bakheng and the great monuments of Koh Ker, Eastern Me bon, Pre Rup, Banteay Srei, and the Khleang, marked a high point from the artistic point of view that would be surpassed only by Angkor Wat.

The only information worth citing about eleventh century is the reign of king Suryavarman I (1002-50). He further expanded the kingdom in the west up to Sukhothai-Sawankhalok on the Menam⁷⁹. The favour Suryavarman accorded to Buddhism earned him the posthumous name *Nirvāṇapada*. His sponsorship of Buddhism in no way, however, interrupted the continuity of the worship rendered to the *Devarāja*. Among the monuments he built temple of Phnom Chisor and the monuments of Vat Ek and of Baset near Battambang. These works are associated with the names of Brahman scholars who occupied high positions⁸⁰.

Before concluding in general the Indianization spanning around 11 centuries a word must be said about the Chinese. It is astonishing that China even while being so close to the Southeast Asian region failed to make any cultural impact except in the deltas of Tongking and north Vietnam. The reason for this lies in the radical difference in the method of colonization employed by the Chinese and the Indians. The Chinese proceeded by conquest and annexation. The Indians nowhere engaged in military conquest and annexation. The Indian kingdoms that were set up in Farther India had only ties of tradition with the dynasties reigning in the India proper; there was no political dependence. The exchanges of embassies between the two shores of the Bay of Bengal were made on the

basis of equality, while the Chinese always demanded that the 'southern barbarians' acknowledge Chinese suzerainty by the regular sending of tribute.

Thus, although China exercised a more or less successful political guardianship over these countries for centuries, her civilization did not spread beyond the area of her military conquests. The peaceful penetration of the Indians, on the other hand, from the beginning extended to the limits of their commercial navigations. India conquered peacefully preserved the essentials of their individual cultures and developed them, each according to its own genius. It is this that explains the differentiation, and in a certain measure the originality, of the Khmer, Cham, and Javanese civilizations, inspite of their common Indian origin.

H) Conclusion

It can be observed from the above descriptions of the history of Southeast Asia for around 11 centuries that religion played a dominant role in the expansion of Indian civilization into the region. Saivism, Vishnuvism and Buddhism at different times were preponderant in different kingdoms. Brahmanic traditions came to be associated with monarchy and dynastic traditions. Indian art and architecture were basically religious. The early period of Indianization saw influence of Amaravati and Gupta styles while later period saw influence from Post-Gupta, Pala, Pallava etc. It is generally believed that the monolithic temples of Mamallapuram, constructed at the beginning of the seventh century by the Pallava

sovereigns, show the closest affinity with the ancient Indian monuments of Farther India. The brick towers of pre-Angkorian Cambodia or of ancient Champa with certain brick monuments of central India⁸¹, and especially with the temple of Bhitargaon of the Gupta era in the Ganges Valley⁸², possibly a descendant of a common ancestor of the brick towers of India and of Farther India. The native languages were not only enriched but also made more flexible by Indian languages especially Sanskrit; they were above all stabilized thanks to the use of Indian script. The use of pre-*Nāgari* script⁸³ from seventh upto ninth century under influence from Bengal was short lived. The influence of the script of the Pallavas was predominant. On the whole (even today) the legacy included system of writing, a great part of the vocabulary, the lunar-solar calendar, the virtually unchanged cosmogonic myths, the great epic themes of the *Rāmāyaṇa*, the *Mahābhārata*, the *Jātakas* and the *Purāṇas*, certain artistic formulas, the administrative and legal framework, and a keen feeling social rank, last vestige of the caste system.

3. Thailand

Speaking for the region presently occupied by Thailand it can be observed that in the beginning of Christian Era Funan must have occupied the upper region. The southern part on Malaya Peninsula there were number of kingdoms but they were under suzerainty of Funan. Fall of Funan gave rise to Dvaravati, the Mon kingdom which occupied southern Myanmar and Thailand; Khmer kingdom of Chenla and later Kambuja or

Angkor occupied most of the eastern part of Thailand beyond the Menam; Sumatran kingdom of Śrīvijaya which rose around eighth century had possession on Malay Peninsular upto Kalah which corresponds to the southern most part of Thailand. In the eleventh century King Anoratha of Pagan (Myanmar) also captured Thai principalities of the upper Menam. It is because of these varied occupation of Thai territories by different kingdoms we are forced to consider the entire Southeast Asian region. These Indianized kingdoms contributed to the culture of Thai kingdom that laid its foundation around 13th century⁸⁴ as described in the following paragraphs.

The Thai first enter the history of Farther India in the eleventh century with the mention of Syam slaves or prisoners of war in Cham epigraphy. In the twelfth century the bas-reliefs of Angkor Wat represent at the head of the great procession of the southern gallery a group of warriors whom wear a costume entirely different from that of the Khmers and whom two short inscriptions identify as Syam⁸⁵. They were very probably Thai of the middle Menam, for it was to the kingdom of Sukhothai that the Chinese applied the name Sien, used for the first time by the '*History of the Yuan*' in connection with an embassy of 1282 sent by sea and intercepted by the Chams⁸⁶. These 'savages', as the Syam of Angkor Wat are sometimes called, were savages only in their dress. They must have had a social organization of which there are still some traces in the social organization of the Laotians principalities. They must have had a considerably advanced material culture but also must have had some contact with India and Buddhism by means of the route that joined India and China through Assam

and Yunnan. Such contact would explain the very clear evidence of the influence of the art of the Palas and Senas of Bengal on the Buddhist art of the Thai in the northernmost part of Menam Basin⁸⁷. Moreover, the Thai have always been remarkable assimilators. They have never hesitated to appropriate for themselves whatever in the civilization of their neighbour and masters might place them in a position to fight victoriously against them.

By the middle of thirteenth century, the Thai had already 'drowned' the Khmer, Mon, and Indianized Burmese communities of the valleys of the south. And when the Thai had acquired some cohesion, their chiefs seem, in the internal organization of their principalities as well as in their policy toward the old Indian civilizations of the valleys and deltas to have been inspired by the Mongols. The rapid success of the Thai in the Menam Basin was the consequence of the weakening of Cambodia and also of the decline, then fall, of Burmese power under the blows of the Mongol conquest in the second half of the thirteenth century. Thai success was less the result of a mass migration than the consequence of the gradual engulfing of the sedentary populations (Mon-Khmer or Tibeto-Burman - speaking people) by immigrants who arrived in ever greater numbers from northernmost parts, united with the Thais already present in the middle Menam and finally imposed themselves as masters over the earlier inhabitants.

While explaining the history of Thai musical instruments here is what a leading authority on Thai musical instruments have to say about the

Indian impact. “Later, when the Thai people had migrated south and were establishing their kingdoms in the Indo-China peninsula and had come in contact with Indian culture - particularly with Indian instruments which the Mon and Khmer cultures had absorbed first - Thai people, who already were musically inclined, assimilated the musical culture of India, along with that of the Mon and Khmer, into their own musical arts. From this contact the Thai created several new kinds of musical instruments such as *phi-n* (a type of *vīṇā*) *sang* (conch), *pi-chanai* (*Shahnāi*), *bandaw* (*damarū*), *grajappi* (a type of *vīṇā*), *jakhay* (a type of *vīṇā*) and *Tho'n* (a type of drum) which are mentioned in the ‘*Traiphumphraruang*’ one of the first books written in Thai, and on the inscriptions from the time of King Ram Kham Haeng, c.1283 A.D., of the Sukhothai period⁸⁸”. The history of musical instruments before this period is in dark. From the preceding descriptions it is clear that, though a bulk of Thai people migrated from the northernmost part there were some already residing in the region of middle Menam who could not have remained aloof from the impact of Indian culture. Even, the Thai of the north had contact with east India as already mentioned. But on the whole it would not be wrong to say that the Thai received Indian culture from the Mon and the Khmer, as the period before their accession the Thai were relatively weak. There had been no attempt to investigate the musical instruments prevalent in the region of Thailand before the above mentioned period; their origin and their descent into the region. It is in the wake of these conditions, this research was undertaken.

One of the earliest citations of music in Southeast Asia come from *the History of Three Kingdoms*. Fan-chan in 243 is said to have “sent an

embassy (to China) to offer a present of musicians and products of the country”⁸⁹. We have, however, no idea about what musical instruments these musicians played. Again from the descriptions of customs of Lin-yi (Champa) in ‘Ma-tuan-lin’⁹⁰ (second half of fourth century) we find mention of musical instruments like cithern (harp type *vīṇā*), five string *vīṇā*, flute, conch and drums. These are the musical instruments that were prevalent in India around the same time. Presumably, they reached Farther India as an effect of Indianization that began from the first century. However, the evidences of musical instruments for the first five centuries of Christian era are sparse (to be discussed at length later). This is one of the reasons for describing the art forms prevalent in India and their impact in Southeast Asia, in the above description of history. The aim was to draw a rough parallel between art forms and musical instruments popular in India, and that made their descent into Southeast Asian region. This parallel remain effective throughout the span considered here.

4. Aims

The purpose of this study is to bring out the relationship between musical instruments of India and Thailand. This includes study of musical instruments that were used in Thailand, the Indian musical instruments that made their way into Thai region; how, where, when they were used and the way they got adapted. Based on the use of these instruments it has also been attempted to expound the influence of Indian civilization in Thai territory in regard to social patterns and religions.

5. Method of Work

Archaeological evidences from Thailand were drawn from reports of excavations and explorations, study of artifacts and antiquities from national museums and private collectors, previous research works regarding arts representing musical instruments etc. These sources have revealed lintels, cave painting, long stone asze, sculptural reliefs, stuccos, numismatic remains and other antiquities which have been thoroughly inspected and interpreted. Whereever possible photograph of the original objects have also been taken. These data are described in detail in Chapter II.

The lack of literary sources dating before 11th century makes epigraphical sources very significant. All the inscription regarding musical instruments were studied at length. Inscription give valuable information about the use of musical instruments and their relation to social structure, customs and religion.

Various evidences from other countries of Southeast Asia were gathered from library sources. The origin and development of the musical instruments were studied from the works of leading authorities on the subject from India. This development is attested by the sculptures, paintings and other archaeological sources which were thoroughly studied from previous works and in the course of field work carried out at various places in India like Ajanta, Ellora, Elephanta, Sanchi etc. The findings from India were henceforth compared with those of Southeast Asia, particularly Thailand.

The research has revealed a number of musical instruments in Southeast Asia presumably having descended from India. These include three type of *viṇās*, various types of drums, flute, conch and cymbals. The research has also shown presence of music ensembles similar to those of India. The use of these musical instruments indicates a strong influence of Indian customs, traditions, religions, beliefs, administration on those of Thailand and other countries.

Evidences of musical instruments from pre-historic time to fifth century A.D. are scanty. We have the bronze drum and lithophone as concrete evidences but other musical instruments are based on the description given by the Chinese sources. The loss of evidences during this period is a problem that even the historians themselves face. In the words of D.G.E. Hall, "But before the appearance of the earliest Sanskrit inscriptions at the end of the fourth century or later the Indian contact with the countries of Sout-East Asia is hidden in dense mist." Also we hardly have any idea of what sort of musical instruments the natives used before they came in contact with Indian civilization. However, an attempt has been made based on folk music and the Chinese sources. In these circumstances we have to rely heavily on drawing a parallel between musical instruments of India proper and Farther India.

Already mentioned the current political boundaries are not taken into consideration, but instead the entire region of Southeast Asia has been taken into account. In this situation the unevenness of researches in the different countries and the vastness of epigraphical sources pose a major problem.

On the other hand, evidences to some musical instruments for example *ḍamarū* have not been satisfactory in Thailand inspite of their abundance in other countries. It can be observed from the description of the history that the Indian people spread more or less evenly and there was sufficient interaction among the kingdoms of Farther India to facilitate uniformity in influence of Indian civilization. Hence to quite an extent the evidences can be considered mutually conclusive. Though all the possible evidences from Thailand have been considered, it is the sculptural evidences in the case of other countries that have been given greater weightage. In spite of this it will be seen that comparing the findings with India we do not err much in the generalizations.

Khmer expansion in the Thai region took place around the eighth century. Khmer culture flourished greatly after this but upto eleventh century it had strong Indian influence. In this course it developed powerful traits of its own. At the height of its power after eleventh century, Cambodia had a strong indigenous culture. The region of Thailand under Khmer rule inevitably got affected by this. After the eleventh century entirely new traits are seen in the musical instruments and the strong Indian influence of the previous period decreases. Thus, we are faced with entirely new set of evidences which are not taken into consideration in this study as, if focuses mainly on the Indian influence. Hence the study has been limited up to the eleventh century only. However, survival and alteration of the instruments found before 11th century have been traced beyond that.

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³G. Coedes. *The Indianized States of Southeast Asia*. (Honolulu : University of Hawaii Press, 1968), p.28.

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¹¹*Ibid.*, p.49.

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¹⁵H.G.Quaritch Wales claims that Thai were already in the region at an early period ["Some Ancient Human Skeletons Excavated in Siam" *Man* (June,1937), pp.89-90.]

¹⁶Krung Devamahanagara Pavara Dvaravati Sri Ayudhya Mahatilaka Bhavanavaratna Rajadhani Puriramya. See Prince Dhani Nivat, 'The City of Thawarawadi Sri Ayudhya' *Journal of the Siam Society*. XXI 1939, p.147.

¹⁷G.H.Luce, "Names of the Pyu", *Journal of the Burma Research Society* XXII (1932), p.90, and XXVIII (1937), p.241; "Burma Down to the Fall of Pagan", XXIX (1939), p.269.

¹⁸G.Coedes. *op.cit.*, p.63.

¹⁹Ibid., p.77.

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²²Ibid.

²³Ibid., p.95.

²⁴Ibid.

²⁵G.H.Luce, "The Ancient Pyu". *Journal of the Burma Research Society*, XXVII (1937), p.249.

²⁶G.Coedes. *op.cit.*, p. 105.

²⁷Ibid.

²⁸Ibid.

²⁹Ibid.

³⁰They were sons of Tissa Dhammaraja Siharaja, who according to the legend, descended from a dragon, as did his wife.

³¹G.H.Luce. *Mons of the Pagan Dynasty*. (Rangoon: 1950).

³²G.Coedes. *op.cit.*, p. 149.

³³Ibid.

³⁴Shin Arahan is a title. His religious name seems to have been Silabuddhi or Dhammadassi.

³⁵G.Coedes. *op.cit.*, p. 149.

³⁶Srikshetra (Prome) and four principalities situated in the region of Rangoon, Pokkharavati, Trihakumbha, Asitanjana, and Rammanagara.

³⁷G.Coedes. *op.cit.*, p. 150.

³⁸G.E.Harvey. *History of Burma*. (London, 1925), p.29-30.

³⁹G.Coedes. *op.cit.*, p. 52.

⁴⁰Ibid., p.52.

⁴¹Ibid., p.53.

⁴²Ibid., p.79.

⁴³Ibid.

⁴⁴Ibid., p.87-88.

⁴⁵R.C.Majumdar. *Ancient Indian Colonies of the Far East*. Vol II., (Dacca : 1937), p.159.

⁴⁶G.Coedes. *op.cit.*, p. 89.

⁴⁷Ibid.

⁴⁸An inscription of A.D. 792 in Old Malay was found in 1960 at Chandi Sewu. See G.Coedes. *op.cit.*, p. 90.

⁴⁹Notably Jatakamala, Lalitavistara, Gandavyuha, Karmavibhanga.

⁵⁰G.Coedes. *op.cit.*, p. 125.

⁵¹Ibid., p.126.

⁵²Ibid., p.144.

⁵³Ibid., p.158.

⁵⁴Ibid., p.79-80.

⁵⁵R.Soekmono, 'Early Civilization of Southeast Asia'. *Journal of Siam Society*. XLVI(1908), p.1720.

⁵⁶This question has been studied by Walters in "Srivijayan Expansion"; he places the conquest of Kedah in the Malay Peninsula between 685 and 689, basing his conclusions on a passage in a work by I-Ching.

⁵⁷One of the I-Ching's teachers, Sakyakirti, lived there. (Junjiro Takakusu, trans., *A Record of the Buddhist Religion as Practised in India and the Malay Archipelago*. [A.D. 671-695] by I-Ching (Oxford, 1896) p.LVIII, lix, 184]

⁵⁸Ibid., p.84.

⁵⁹Ibid.

⁶⁰G.Coedes. *op.cit.*, p. 109.

⁶¹Ibid.

⁶²Ibid., p.130.

⁶³Ibid., p.141.

⁶⁴Ibid., p.69.

⁶⁵Ibid., p.72.

⁶⁶Contary to Indian usage, the son of a Brahman and a princess of royal blood is born a Kshatriya.

⁶⁷This period has been studied by Pierre Dupont in 'La dislocation du Tchen - la' and 'Tchen-la et Panduranga', *Bulletin Dvaravati l'Ecole Français d'Extreme-Orient*. XLIII p.17 and XXIV (1949), p.1-19.

⁶⁸Gilberte de Coral Remusat : *L'Art Khmer* (Paris : 1940) p.117.

⁶⁹G.Coedes. *op.cit.*, p. 97.

⁷⁰*Ibid.*, p.101.

⁷¹*Ibid.*, p.103.

⁷²Gilbert de Coral Remusat. *op.cit.*, p.117-118.

⁷³G.Coedes. *op.cit.*, p. 110.

⁷⁴*Ibid.*, p.111.

⁷⁵*Ibid.*, p.111-114.

⁷⁶*Ibid.*, p.114.

⁷⁷"Island of glory", a distortion of the word 'garg-yar' (modern koki).

⁷⁸G.Coedes. *op.cit.*, p. 115.

⁷⁹*Ibid.*, p.137.

⁸⁰*Ibid.*, p.136.

⁸¹The comparison is proposed by Reginald May *A Concise History of Buddhist Art in Siam*. (Cambridge : 1938), p.63-65.

⁸²Alexander Cunningham. *Archaeological Survey of India*. Annual Reports, XI (1875-78), p.40-46.

⁸³G.Coedes. *op.cit.*, p. 30.

⁸⁴*Ibid.*, p.190.

⁸⁵*Ibid.*, p.191 and G.H.Luce. in 'The Early Syam in Burma's History', *Journal of Siam Society*. XLVI (1958), p.140-141.

⁸⁶G.H.Luce. *op.cit.*, p.140.

⁸⁷G.Coedes. *op.cit.*, p. 191.

⁸⁸Dhanit Yupho. *Thai Musical Instruments*. (Thailand : 1971), p.4.

⁸⁹G.Coedes. *op.cit.*, p. 41.

⁹⁰*Ibid.*, p.29.

CHAPTER II

Musical Instruments from Archaeological Sources in Thailand.

To study the history of any culture archaeological sources forms a significant media. The antiquities together with excavated articles, sculptures, monuments, numismatic remains and paintings give valuable data on the life, society, religion, administration etc., of the people of preceding ages. To study particular aspects of a culture like the music, the concerning archaeological data is needed to be segregated from the vast pool of general archaeological evidences.

In Thailand all the above mentioned sources have revealed one or the other musical instrument. These evidences give considerable information regarding size, shape, form etc., of the musical instruments and the way in which they are played. The epigraphical sources obviously fail to give these. Evidences of musical instruments have been found almost throughout Thailand, from archaeological excavations. From southern Thailand on Malay Peninsula a large number of Vishnu images were found. In northeastern Thailand especially Prachinburi and Nakorn Ratchsima lintels and conches have been found. Excavation in central Thailand have revealed the bulk of evidences like numismatic remains and Dvaravati sculptures.

It must be kept in mind that, it would be a mistake to conclude that whatever musical instruments these evidences have shown here were the only ones that were used in area of Thailand before 11th century.

As indicated earlier this region was a part of much wider phenomenon of Indianization and the kingdoms that occupied the area of Thailand extended much beyond its present boundaries. Hence, the evidences from the entire Southeast Asia are needed to be considered. These are dealt fully in Chapter IV.

A : Description of Archaeological Evidences

I. Musical Instruments from Excavations.

a) The prehistoric lithophone.

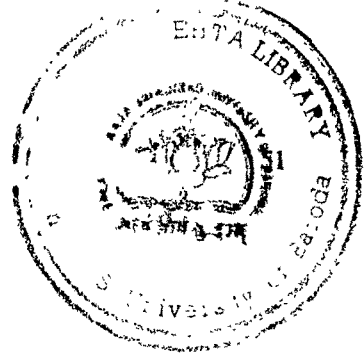
From the archaeological excavation in the south of Thailand around 1977 were found six long stone adzes from the border of Klong Gay, Nakorn Srithammarat¹. The adzes were found to be of different sizes as follows.

No.	Wide cm	Long cm	Thick gram	Weight cm
1.	6.5	32.5	1.2	760
2.	6	34.0	2.5	2840
3.	7.5	36.5	1.5	760
4.	5.5	33.5	1.5	500
5.	5.5	22.0	1.0	340
6.	6.5	33.0	2.0	740

Though most archaeologists identify it as a tool of Prehistoric people, it can be a musical instrument due to the following reasons.

1. The adzes were found together and could have been placed on the ground in a line or in a semi-circle and beaten with a stone tool or stick. Such an instrument is a primitive lithophone of local people in Northern Togo, Africa. Also, it looks like the ancient musical instrument in Chinese and English history which is again called as lithophone.
2. These adzes could have been placed on two sticks or wooden box supporting the ends or on wooden bar to make it louder.
3. The adzes have hole near the end with the help of which they could have been hung on a string or hooks.

The prehistoric humans may have accidentally sounded these supposedly discarded tools and found resonant sound and different tone according to varying sizes, which may have given them the idea to play upon it. This instrument could be a primitive forerunner of the present day Thai musical instrument called xylophone which is described as a musical instrument consisting of flat wooden bars struck with small wooden hammers. Local Vietnamese have stone xylophone which they called 'Haches de Hiboue' which means the sound of barn-owl. (pl.1)



b) The Mahoratuk

The oldest of drums found in the region of Southeast Asia and south China, the *Mahoratuk* is in used even today. It is made of metal - an alloy of copper, lead and tin (bronze), in proportions carefully determined and fixed by artisans. The ores are melted, the metals fused and molded into the desired pattern. The shape of drum is cylindrical with the base and the top expanded. The oldest drums of this type have been found in the vicinity of Combodia. The *Mahoratuk* is found throughout the Southeast Asia and China. In Malasia, drums of this type were excavated and were found to be of about 562-572 years before Christian Era.²

In Thailand number of *Mahoratuk* were unearthed. Some of them are in excellent state of preservation and are kept presently in the national museum. A short description of some of them is as follows :

1. The *Mahoratuk* dating back to Dong-son age³ was excavated from Tung Yung, Uttaradit, Northeastern Thailand⁴. It is 52.7 cm; high and has a diameter of 65 cm. On the top there is a figure of a star with 12 rays in the center. Concentric to the star are male figures decorated with feathers; still outer to this are flying bird figures. On the either sides there are handles for carrying the drum. (pl.2) The succeeding five drums also belong to the Dong-son age.

2. The *Mahoratuk* found from Ta-Sao, Uttaradit⁵ : is 53 cm. high and has a diameter of 70.8 cm. On top is a figure of star with ten rays

in the center; concentric to this are male figures and flying birds on circular strips one after the other. Still outer to these are concentric dotted circles. Near the rim there are four snail figures at equal distances. On the core there is a design in comb-tooth pattern. There are four handles equally spaced near middle of the drum.(pl.3)

3. The *Mahoratuk* unearthed from Ubon Ratchatani⁶, northeastern Thailand it is 50.5 cm. in height and 60.5 cm. in diameter. There is the star with 14 rays in the center while the other designs are not clear. There are two handles for carrying the drum on the two side.(pl.4)

4. Excavations at Ta-Sao, Uttardit⁷ have revealed a *Mahoratuk*. It is 24 cm. high and 16.5 in diameter. In the center of the top is a star with 12 rays. There are concentric strips with various designs including small circle with dot, flying birds and comb-tooth design. There are two handles on either sides. (pl. 5)

5. The *Mahoratuk* excavated from Sahaskhan, Karasin, northeastern Thailand⁸ it is 33.4 cm. in height and 65.7 cm. in diameter. A star with 12 rays is in the center and there are concentric designs in dotted circles and comb-tooth pattern. (pl. 6)

6. The *Mahoratuk* found from Khao-sam-kaew, Chumporn, southern Thailand⁹. 18.5 cm. In height, the drum has a diameter of 15.6 cm. A star with eight rays is in the center of the top. Outer to these are

four bird figures flying anticlockwise. Two handles for carrying are on either sides (pl. 7).

7. The other *Mahoratuk* excavated from the same site as mentioned above has height of 55.9 cm., and a diameter of 68.8 cm. In center of the top it is star with 12 rays and outer to this are numerous designs of concentric dotted circles and comb-tooth pattern. A circular strip in the middle has a figure of birds flying in anticlockwise direction. Around mid-height there are four handles for carrying the drum. (pl. 8)

8. The *Mahoratuk* found from Chaiya, Surat Thani, southern Thailand¹⁰. The drum is 39 cm. high and 51 cm in diameter. A star with 12 rays is in the center. The design outer to this are similar to the drum mentioned above except that there are only four birds in the middle strip and flying in clockwise direction. There are four handles for carrying. (pl. 9)

9. Excavations at Wat-kee-lek, Surat Thani¹¹ have revealed a *Mahoratuk*. It is 44 cm. high and 50.5 cm. in diameter. The center of top has a star with 12 rays. The four bird figures in middle strip have sharp beaks, long tails and are flying in an anticlockwise direction. A pair of handles are on either sides of the drum (pl.10).

10. The *Mahoratuk* found from Wat Taling-phang, Surat Thani¹²: height of the drum is 53.5 cm. and diameter 69.5 cm. Star with 12 rays is in the center of top. Minute designs are there in the concentric strip

surrounding. There are human figures in group of three in one of the strips. Outer to this are flying bird with long beak and tail. The outermost strip has boats with 12 people in each. The drum has four holders. (pl. 11)

11. The *Mahoratuk* found from Ban Ket Kai, Nakorn Srithammarat, southern Thailand¹³ has partially decayed; the middle and base of the drum was found to be completely ruin. Height of the drum is 38 cm. and diameter is 80.5 cm. On the top surface star with 12 rays is in the center and in the midstrip there are six birds with long beak and tail flying in counter-clockwise direction. There are other minute designs on the rest of drum. On the outermost strip there are four statuettes of frog equally spaced and facing anticlockwise. Out of the four handles two are intact. (pl.12)

12. The *Mahoratuk* excavated from Ban-chi-thuan, Ubon Ratchathani, northeastern Thailand¹⁴: height of the drum is 51 cm. and diameter 70 cm. The surface of top is more or less plain except for the star in center and few other concentric designs. There are four holders that look like a knitted cord. The drum belongs to the Dong-son culture. (pl. 13)

13. The *Mahoratuk* found from Ban-na-pho-tai Ubon Ratchathani¹⁵: height of the drum is 21.5 cm. and diameter 33 cm. The surface plate of top expand out from the trunk. Out of the four frog statuettes two have remained. Most of the designs on top have disappeared and it is also broken. A pair of holders are on two sides of the drum.(pl. 14)

A German scholar names France Heger has extensively studied the *Mahoratuks*. He classified them according to the decorative designs on them and their origin. (pl. 15)

1. Heger style I : it is large size and oldest of the drum. The base is expanded like and upturned lotus, the middle portion is cylindrical and the uppermost part is rounded and bulging. The following type of designs appear on this type of the drum.

A : There are human and animal figures on the top and on the middle cylindrical portion.

B: There are animal figures on the top and human on the trunk.

C: There are geometric designs on the top and the trunk. The top also have flying bird figures. The geometric designs include:

Star with number of pointed rays ranging from eight to sixteen; comb-tooth pattern, saw-tooth pattern, circle connected by slant lines which is typical of Dong-son art.

A lot of figures on the drum illustrate lifestyle of people of the age. These include man rowing boat, pounding rice, walking, dancing, playing musical instrument and holding weapons like axe or spear. The human are seen wearing feather on their head and also wearing cloth decorated with

feather. Sometimes there are statuettes of frog equally spaced and facing clockwise.


2. Heger style II : This is again a big drum, the base and middle portion of which are nearly cylindrical. The upper portion is slightly bulging and the top plate expand out of the main trunk of the drum. There are two pairs of holder. Design of star is in the center of top which is finer than Heger style I. The drum is also slightly higher. Muong tribe in Vietnam use it even today.

3. Heger style III : the trunk of the drum is almost cylindrical throughout. The center of top has a star with 12 pointed rays. There are four frog statuettes on the outerstrip of the top and two smaller frogs cling to each of these. There are elephant, monkey and scallop figures towards lower end of trunk. There are small holders on the side for carrying the drum. It is often called Karen drum.

4. Heger style IV : this drum is short cylindrical and smaller in size. Also called Chinese style drum, it is similar to Heger style I, except for the middle cylindrical part and frogs on the top. There are two pairs of holders on side.

c) The Terracotta Conches

1. A terracotta conch was excavated from Ban-raboet-kham, Prachinburi, northeastern Thailand.¹⁶ The conch dates back to 8-11th century¹⁶ and almost wholly intact. It is 15.5 cm. long and the largest diameter is 10.5 cm. There are three spirals towards the tip which has a hole for blowing. In the mouth of the conch there are grooves for placing finger while holding the conch. (pl. 16)

2. A  terracotta conch was unearthed from Kao-noi castle, Prachin-buri. It dates around 8th-11th century¹⁷ and is partly broken. It is 16.5 cm. long and the largest diameter is 8.5 cm. The clay is red but the surface both inside and outside is enameled with green colour. It is again imitation of natural conch. On the tip there is a hole for blowing. (pl. 17)

II. The Musical Instruments Depicted in Painting.

Surveys of caves are being conducted to study cave paintings in Thailand. It has been found that almost every region has rock cave paintings. A colour painting found in Ta-duang cave, Kanchanaburi, central Thailand represents a group of people dancing and playing what appears to be large size drums. The painting is believed to be 2000 - 3000 years old¹⁸. Male figures with long legs are seen carrying large size drum hanging on a wooden pole. However, some researchers have suggested these to be coffin but a human figure beside one of the drums is clearly seen

beating it with a stick. The human figures around the drums appear to be dancing. (pl. 18)

III. The Musical Instruments Depicted on Sculptures.

a: Reliefs.

Large numbers of Vishnu icons dating later than fourth century were found in Thailand, most of these were located in the southern part of Thailand on Malay Peninsula. Most Vishnu images, as in India holds the conch in the hand.

1. Vishnu idol found from Wat Sala-thung, Surat Thani dates around fifth century¹⁹. The sculpture is 67 cm. high and is influenced by early Indian art. The Vishnu has four arms, the right arm is raised and the hand is in *abhaya-mudrā*. The back right hand holds *gadā* and the fore right hand holds conch from its lip. The tip of the conch is close to Vishnu's waist. The thumb is laid along spiral of the conch and conch's tail touches down to the Vishnu's waistband. The image has high crown, long *kuṇḍala*, necklace, bracelet and long *dhotī*. (pl. 19)

2. The Vishnu image found from Ho-phra-Narayana, Nakorn Srithammarat dates around fifth-sixth century²⁰. Height of the sculpture is 78 cm. The image has four arms out of which only the one holding the conch has remained. The conch is held from its lip in the manner similar to

the one described above. The Vishnu idol is wearing high crown *kunḍala*, necklace, *yajñopavīta* and long *dhotī*. (pl. 20)

3. The Vishnu image from Wat Phra Phreng, Nakorn Srithammarat dates around late sixth century.²¹ The sculpture of 65 cm. high and has four arms. The back hands have husting. The right hand holds the lotus flower while the left hand holds the conch from its lip. It is held near the Vishnu's hip. The thumb is laid along the spiral. The deity is seen wearing a high crown, *kunḍala* and long *dhotī*. (pl. 21)

4. The Vishnu sculpture found from Wiang-sa, Surat Thani dated around early seventh century.²² It is a high relief 131 cm. high. The carving is more skilled than the earlier centuries. The right forehand holds a lotus flower and back right hand holds a *chakra*. The left forehand holds *gadā* and left back hand clutch tail of the conch; the lip and tip of the conch are seen above. The Vishnu is wearing a high crown, *kunḍala* and long *dhotī*. (pl. 22)

5. The Vishnu images found from City post shrine, Songkhla, Mr. Mat Hongchu's garden, Nakorn Srithammarat and Petchaburi²³, all dates back to eighth century. All of them have four arms and are dressed identically as described earlier. They hold conch from its tail and spiral and lip of the conch are clearly seen. (pl. 23)

6. The Vishnu sculpture from San Phra Narayana, Surat Thani⁶⁰²⁴ dates 11th century. The right forehand is in *abhaya-mudrā*. The left front hand is laid across his hip while the back left hand holds a *chakra*. The right back hand supports a conch with two fingers. The conch is more decorative and has wings. The deity is seen wearing a short *dhotī* with a waist-band, high crown, necklace, bracelet, *yajñopavīta* etc. The style is influenced by the early Chola art which can be inferred from the design of many circular knobs that appear on the icon. The late Pallava influence is seen on the design of the conch and *chakra*. (pl. 24)

b: Lintels

Carvings of Vishnu appear on many of the lintels dating around tenth century. These include Vishnu on *garuḍa* from Wat Prangthong, Nakorn Ratchasima, the Vishnu on *garuḍa* from Phnom Wan Castle, Nakorn Ratchasima²⁵ (both carved in Bakheng art style), Vishnu *Trivikrama* at Prasat Hin-Muang-Khaek, Nakorn Ratchasima²⁶ (Koh-Kae style) and Vishnu on *garuḍa* at Prachinburi²⁷ (Prae-Rup style). All these carvings are found in the region of northeastern Thailand. The conches held by all these Vishnu carvings is in the left back hand. (pl. 25-26)

c: Stuccos and Bas-Reliefs

1. Dvaravati stucco

As already stated in the introduction the Dvaravati kingdom flourished between sixth up to eleventh century. The population was

basically Mon. There was a profound impact of Indian civilization on almost every aspect of the kingdom. Mon, Pali and Sanskrit were the main languages used. Major religion practice was Hinayana Buddhism; Mahayana Buddhism and Hinduism were also followed. Excavations have revealed number of artifact and antiquities belonging to the Dvaravati kingdom. The styles of art were influenced by Gupta and post-Gupta styles which flourished in central and western India in the fourth-eighth century.

The stucco showing a woman playing variety of musical instrument was found from Ban-ku-buo, Ratchburi, central Thailand. It is believed to belong to the seventh century.²⁸ The carving has five women sitting in a row. The first woman on left is squatting. She wears her hair tied in a high bun. She also wears a cloth hanging from her shoulders. Among ornaments she is seen wearing earrings and necklace. She holds in her hands what appear to be wooden clappers.

The second woman is also squatting and wearing cloth similar to one mentioned above. She has her hair tied in a short bun. One of her hands is in front and she appears to be singing.

The woman in the center is again wearing her hair in a high bun. Style of her cloth is slightly different. She holds in her hand a pear shaped or guitar shaped *vīṇā*. The *vīṇā* has five strings upon which the woman is playing with her right hand. With her left hand she is controlling the chord.

The end of the *vīṇā* has five knobs; three on one side and two on the other. These knobs are used for tightening or loosening the strings.

The woman sitting next has hair and cloth in similar manner. She appears to be wearing a necklace. She holds in her hands small size cymbals. The string with which the cymbals are tied is hanging down in a curve.

The woman on extreme right is squatting and she wears cloth and her hair is in the same way. She holds with her two hands what appears to be a gourd *vīṇā*. She is seen playing the string with her right hand and controlling the chord. The gourd is touching the stomach of the woman, perhaps to make the sound produced more resonant. (pl. 27)

2. The *Kinnara* Stucco

The stucco with a *kinnara* carving was found from Chulapathon Chediya, Nakorn Pathom, central Thailand, dating 7-11th century. The region from which it was found belonged to the kingdom of Dvaravati. The *kinnara* has wings and short legs like that of a bird. The *vīṇā* of gourd type is in the hand of the *kinnara*. The gourd is laid on his chest and the other end of the *vīṇā* is toward his hip on the right. (pl. 28)

3. Bas-relief of Phra-sri

The bas-relief was found from Nakorn Pathom dating around 725 - 775 A.D.²⁹ The carving shows a goddess with four arms. Two elephant sprinkle water from two sides. There are numerous other objects carved around the goddess like *chamara*, fan, *pūrṇaḡhaṭa*, *chattra*, goad for elephant, *vajras*, *akṣhamālā*, golden fish and conches (pl. 29). The two conches are on extreme end of the carving.

IV. The Musical Instrument on Numismatic Remains.

The Conch Coins.

Number of silver coins were excavated from different sites belonging to the region of Lopburi, Nakorn Pathom and Supanburi. These coins mainly represent the conch which is perhaps only an auspicious symbols but it shows how important the conch was in the contemporary age. Most coins representing the conch are similar because they date from 6th - 11th century³⁰ and belonged to the Dvaravati kingdom.(pl.30-31)

The *ḍamarū* coin.

A coin with an hour-glass figure on the reverse side was found from Ta-kae, Lopburi, central Thailand dating around 7th - 11th century³¹. The coin is made of silver and the hour-glass shape figure is believed to be that of the *ḍamarū*. This assumption is perhaps correct

considering the name of city “Loptharavapura” on the obverse side of the coin, from where number of Shivalinga sculptures were unearthed. The *damarū* being associated with Shiva may have been used as the symbol on coin in the region where worship of Shiva was so widespread considering the large number of *lingas* found. (pl.32)

B: Analysis and Background of the Musical Instruments

1. Early bamboo instruments

Clapping and thumping of feet may have been used to express happiness by prehistoric humans. Gradually they may have taken up the use of discarded stone implements to produce rhythmic knocking sound. Different sizes of stone produce different sounds which may have given them an idea to beat a number of stones together. This perhaps explains the long stone adzes of different sizes found together. These can make five different notes when beaten³². This primitive lithophone may have given way to bamboo percussion instruments. Bamboo being a hollow produce more resonant sound and has slight echo effect. Moreover, it is easily available in various sizes.

As bamboo is biodegradable we are obviously not left with any evidence of such instrument but the widespread use of bamboo musical instruments in practically all parts of Southeast Asia points to the antiquity of these instruments and, probably, that of the music they play. The present day xylophone perhaps evolved from crude forms of such bamboo

instruments. Before xylophones were included in classical music orchestra were considered folk instruments. This explains why it never found way to sculptural depictions which generally included the sophisticated instruments that arrived from India.

Other folk instruments widely in use are bamboo wind instruments. A historical citation of mouth organs and jew's harp in the Chinese *Shih Ching* (Classic of Poetry) shows that these instruments were known in the eighth century B.C. Previous to this time, other bamboo instruments were probably in use, just as bamboo tools were used in pre-Neolithic times³³.

The music of pre-Neolithic types of bamboo musical instruments, such as are played in the 20th century, may be just as old as these instruments. One general feature that points to this antiquity is the widespread and frequent use of a very simple musical element : sustained tone (drone) or repetition of one or several tones (ostinato). Sustained tones appear in the mouth organ, where one or two continuous sounds are held by one or two pipes while a melody is formed by the other pipes. Prolonged tones may also be heard in rows of flutes played by one person in Flores. One flute acts as ostinato and the rest make a melody. In group singing, an underlying held tone is common. Repetition of tones occurs in bamboo instruments (jew's harps, percussion tubes and half percussion tubes, zithers, clappers, slit drums) as well as in non-bamboo instruments³⁴.

2. Early bronze instruments.

Mahoratuk, the bronze drum presumably evolved in the bronze age. There is still a great deal of uncertainty concerning who the first people were to make and use this drum. Some archaeological experts quote a passage from the annals of the Chinese dynasties which says that about 1135 B.C.,³⁵ there was a Chinese leader who led Chinese army to suppress the 'forest people' in the province of Tong-kin. After he had defeated them, he collected together all the drums of the prisoners of war, had them melted down and molded into a metal statue of a horse which he presented to the Emperor, who was very pleased with the gift. This account shows that the drum of these 'forest people' were made of metal. Between 181 A.D. and 231 A.D. another record in the Chinese annals relates that, a Chinese general named Khong-Bayng of the Emperor Lao-pi, also led an army against the 'forest people' in the area of Yunnan province in the southern China in 226 A.D. and was able to suppress them. It appears that in one of the battles against a leader called Bayng Hek, the Chinese General, Khong Bayng, used a deceptive trick to undermine the morale of the 'forest people'. He had metal drums placed in front of caves and then had them beaten. The caves acted as resonance chambers and created a fearful din. Whatever that may be, one thing is clear that the Chinese were not the original inventors of the drum, but that they took them from the people in the southern provinces and then changed and improved them later. The problem of who were the original inventors of the metal drum is still unsolved. Some authorities have attempted to solve the problem through an examination of the details of the ornamental pictures which appear on the drums, but as yet there has been no final agreement. The

only factor upon which all authorities seem to be in agreement is that this drum came originally from some part of the Indo-Chinese Peninsula. Some authorities put the place of origin more definitely in the southern part of the peninsula, in the northern part of the old Khmer empire.³⁶

It is found that the *Mahoratuk* is distributed through many countries in Asia such as China, Laos, Myanmar, Vietnam, Cambodia, Malaysia, Indonesia and Thailand. They call the different names as to their languages as in the northern Thailand and Burmese languages, it is called '*Pha-si*' which means 'frog drum' since there are frog statuettes on the drum. Karen people, the tribes of northern Thailand and Myanmar held the drum with great respect and the leader of the people was required to use it regularly. If any person has even one drum of this kind among their possessions, they are highly esteemed. In fact, they would have a higher social status than the owner of seven elephants. Owing to the fact that this group of people - the Karens used the drum so much and esteemed it so highly, it came to be called as 'Karen bronze drum.'³⁷ In China, it is called '*Tung Ku*' while in Khmer language called '*Sakor Moharith*.'³⁸

Number of beliefs and ceremonies are associated with the *Mahoratuk* which can be as old as the drum itself. Liao tribe in China believe that the person who has the biggest *Mahoratuk* would be the chief of a village. Ka-lamed tribe in southern China procured the *Mahoratuk* to be respected as 'Lem' which is a noble position with no succession on generation basis. Even the Yueh people in Vietnam believe the *Mahoratuk* to be a sign of power and leadership.

The *Mahoratuk* is used in death ceremony in several ways. Some tribes in Vietnam have a tradition to hang the *Mahoratuk* over the dead body of the chief of the family. When the food is offered to the dead body, the drum is beaten. The Karen tribe beats the *Mahoratuk* to wake or summon the spirit. In Ka-lamed community if the owner of the *Mahoratuk* dies without a successor, the drum is destroyed to pieces and buried with the dead.

Chinese documents of the Sui dynasty states that the commander of the Liao beat the drum in order to gather warriors for fighting or even to declare the victory.³⁹

Ka-lamed believe that beating the *Mahoratuk* after a paddy harvest would send the spirit to the silo in order to protect the paddy from thieves and animals. The Yueh beat the drum to assemble angels to cure a patient and for spirit eviction.⁴⁰

The *Mahoratuk* is used in the ceremonies which are performed for coming of the rains. The figures of frog, scallop, snail and elephant are the animals related to rain. People of south China believe frog and toad to be a sign of approaching rain. Some Burmese tribe use the *Mahoratuk* in festival. In Thailand it is used in the Royal and state ceremonies.⁴¹

The other bronze instrument widely used throughout Southeast Asia today is gong and gong ensemble. The earliest of these are kettle gongs (deep-rimmed gongs), which date back to about 300 B.C.⁴² In Burmese

gongs the use of a heavy beater for the center and a lighter stick to strike the side denotes an opposition of a full and a tiny sound applied today also to the '*babandil*' and other gong ensembles in Palawan and Borneo.⁴³ Flat gongs without a central boss are not as widely used. they are found in the hills of Thailand, Laos, Cambodia, Vietnam, in some parts of Indonesia, and in the northern Philippines and may have come to Southeast Asia either through China in the sixth century. However, the early use of gongs may not have extended beyond some temples and for announcements. Gong ensemble attained position in classical orchestras only after 14th century.

3. The drums depicted in the painting

The large size drums depicted in painting (pl.18) may have been membranophonic. Two persons carrying each of them on a wooden pole shows that it must have been heavy and of considerable dimensions. Perhaps they were used during certain ceremonial processions or during funeral. Today this type of drum is a folk instruments used by the people of northern Thailand. They beat the drum during festival celebrations and during some processions. The drum was not represented in the early sculpture owing to its use by natives. The sculptural depictions were largely dominated by the instruments that came from India.

4. The musical instruments from India

a) The conch

The use of the conch along with horn is known to us for centuries. In India use of the conch is mentioned right from the early vedic period. The sound of conch was considered auspicious and was supposed to drive away the evil spirits. Gradually it came to be associated with the Lord Vishnu. The *kambustha*,⁴⁴ 'shell-dwelling' creatures like crabs, molluses and snails were considered unclean and generally killed by drying in the sun. But shells themselves were highly valued and put to a variety of uses. Sea shells were used for ornamental purposes and some like the cowrie (*kaurī*) a gastropod which is prized among many primitive people, were long used as currency.

After Krishna slew the marine demon Pañchajana who lived in the form of a shell at the bottom of the sea, he used his body, the *pāñchajanya* for a trumpet. The *śankha* or conch-shell first emerged from the Churning of the Ocean and was taken by Vishnu from whom it was later stolen by the shell-demon Śaṅkhāsura. When Krishna slew this demon he dedicated his shell, the *śankha*, to his own service and hence conches are blown to this day in temple worship and in battle. The *śankha* also has a sexual significance, perhaps because of the longitudinal opening and the light transparency of the interior. The Epics speak in glowing terms of the 'splendid great-shelled women', the term *śankha* here denotes the vulva⁴⁵.

Most of all Vishnu images have the conch in their hand. However no Vishnu image showing him blowing the conch was found in Thailand. Nevertheless there is no dearth of Vishnu images blowing conch in India. Also as mentioned in the mythological tale described above Krishna, an incarnation of Vishnu, employed the conch in his service for blowing it. From all these it is reasonable to say that the conch in Vishnu hand was treated as a musical instrument. Elsewhere in India like Amaravati, Nagarjunakonda and Ajanta caves the depiction of persons blowing the conch are profuse. A really adept person at blowing the conch is capable of producing even seven tones. The use of the conch continues even today, as in India, in Hindu temples. In Thailand it is also used in royal ceremonies.

b) *Vīṇā*

i) The guitar-shaped *vīṇā*

The pear-shaped or the guitar type *vīṇā* like the one held by a woman on Dvaravati stucco developed in India. The *vīṇā* especially became very popular after the fourth century. It has a pear-shaped resonator and a straight neck : five strings extend across the resonator's flat top which appears to have been of leather. The holes seem to be in the top cover of the resonator. The *vīṇā* has five small pegs to regulate the tuning by tightening or loosening them. Dvaravati was profoundly influenced by Indian culture and the *vīṇā* came to the region through this impact. The

guitar *vīṇā* are also observed on the contemporary sculpture of Thailand's neighbouring countries which are discussed in detail in Chapter IV.

ii) The gourd *vīṇā*

The gourd *vīṇā* as seen on the Dvaravati and *kinnara* stucco was a popular musical instrument in India. This *vīṇā* has either a half gourd or full gourd attached to the upper end of the stick. The gourd is used for resonance. The *vīṇā* has one or more strings and the gourd is held close to the body for altering the resonance. The *vīṇā* held by the *kinnara* has gourd placed on his chest while the woman on the Dvaravati stucco hold the gourd close to her stomach, Again such *vīṇā* are also observed in other countries of Southeast Asia.

c) Drums

Number of drums that either came from or influenced by India are still used in Thailand. Unfortunately no sculptural evidences of drums from Thailand has yet been found. Number of drums were popular in India from first up to the eleventh century. The sculptural depiction of these drums is however profuse at the other places, especially Borobudur and Champa. Also at least two types of drums are mentioned in inscriptions found from Thailand itself. Hence drums were in use in the region of Thailand be it the kingdom of Dvaravati or the later Khmer kingdom.

Damarū the hour-glass shape drum as on the Lopburi coin is associated with Shiva. It appears with almost all Nataraja sculpture found in India, Cambodia and Champa. It is supposed to accompany with Shiva in his cosmic dance and *Tāṇḍava Nritya*. It is a small size drum whose both the mouths are covered with skin. A small ball is attached to a string and tied around the narrow waist. The drum is held in one hand and rolled from side to side. When the ball hits the cover mouth alternately it produces rhythmic effects. It is used even today mainly in Shiva temple. In Thailand it is used in royal ceremony and Hindu Temple.

d) Cymbals and clappers

The small size cymbals and what appears to be wooden clappers are in the hands of two women in the Dvaravati stucco. These instruments are used to indicate and control the rhythm of other musical instruments like the *vīṇā*, the flute etc. In India from the beginning the singer used the palm of his hands in order to indicate the rhythm or *tāla*. Later the instrument like wooden clappers, metallic chimes and cymbals were used for this purpose. The small size cymbals are similar to those appear in Bharhut sculpture and Ajanta paintings. The cymbals may have come to the region of Southeast Asia along with the *vīṇā* and the flute as they are almost invariably accompanied these instruments.

C: The Classification of Musical Instruments.

It is difficult to say which musical instrument was developed first and how in the absence of authoritative and recognised evidences. However, from an understanding of the basic development of the human society some inferences can be drawn. Music being auditory, it is not possible to listen to the music of the ancient time today. However we have sought to express something beyond the mundane through the medium of the art throughout the ages; and music is one of the most important performing arts that enabled us to express stirrings of the soul. And for that purpose any object was used, which can produce music, from a piece of stone or a leaf to the most complicated tone synthesizer. Musical instrument can therefore be defined as any object or instrument which produce music.

The vibration of certain substances create sound. The sound creating substances are many, but a few were known in the early days of human history. A tightly stretched string, for example, is one which is known from the very early days. Moreover a taut membrane or an enclosed column of air may be assigned to a very ancient time as they formed part of very ancient musical instruments of India. Naturally sonorous materials like crystal or nephrite were also known from very ancient times. However the earliest musical instruments were probably solid materials which are resonant by nature. They probably used to be played upon along with clapping of hands and stamping of feet.

Long before music rose to a form of art, the rare piece of stone or metal that produced mysterious sound when struck may have had a magical appeal and such a mysterious sound producing stone or metal was most probably used as ritual implement for the special purpose of warding off evil by virtue of its musical sound.

The theory of instrumental music rests on the concept that every friction creates sound, but music is concerned with only melodious sound. This melodious sound is produced in five ways;⁴⁶ 1) through nails, 2) through wind, 3) through leather or skin, 4) through iron or any metal, and 5) through body. Out of these, the sound produced from throat is natural; and the remaining four sounds are man-made. This classification was first done by Bharata in the *Nāṭya-Śāstra*. The main portion of the book was written about 200 or 100 B.C. *Nāṭya-Śāstra* acquired the present shape between 200 and 300 A.D.⁴⁷ The four categories of musical instruments classified by Bharata is the Indian traditional classification which is widely accepted even today. This classification is as follows.⁴⁸

1. *Ghana* (Idiophone)
2. *Avanaddha* (Membranophone)
3. *Sushira* (Aerophone)
4. *Tata* (Chordophone)

1. *Ghana* instruments - *ghana* instruments are those instruments which give resonance by the concussion of two solid bodies. Before language come into existence humans may have had the knowledge of rhythm from walking, running jumping etc. In the past *ghana* instrument

were probably made on the basis of this knowledge from naturally available sources. Western scholar Curt Sachs has also mentioned in his book 'The History of Musical Instruments' that the *ghana* instruments were the first form of musical instruments that originated.

It may be noted that out of the above mentioned four classes, only *ghana* instruments have no melodious sound and yet they are an integral part in music. According to Indian traditionalists, melodious sound requires resonance and according to modern scientists melodious sound requires sympathetic vibrations. But in the *ghana* class, instruments do not have melodious sound, as most of them are made from very meager and absolutely natural raw-materials. As for example, two dry sticks, pieces of bones, dry leaves etc., may take the form of *ghana* - instruments.

The earliest of our evidences the lithophone is grouped in this class. Though *Mahoratuk* is used as a drum, its entire body is made of metal, hence it must belong to this category. Besides these cymbals, clappers, gong and xylophone are classed under *ghana* instruments.

2. *Avanaddha* instruments - The instruments which are hollow from inside, covered at both ends with skin or hide and produce sound by beating with hands or with sticks are called *avanaddha* instruments.

After the evolution of *ghana* instruments, the instruments of *avanaddha* class probably come into vogue. Both the *ghana* and

avanaddha instruments are rhythm - oriented from the point of view of usage and constitution or structure.

A skin or parchment membrane held taut around its edges produce sound when struck. The drums are made of this principle. All membranophonic instruments are made of this principle.

In the primitive stage, the skin of any animal was stretched over any hollow things such as vessels, tube or frame to make the *avanaddha* instrument. And in such type of instruments, the sound could be produced slow or loud according to their shape. But there was no reverberation in such sound. So the sound could not take the form of melodious sound in the primitive type of *avanaddha* instruments. Therefore from ancient times, the system of adding some special kind of plaster (usually a mixture of flour and water) on covered skin, started in India increase reverberation in the *avanaddha* instruments. A detailed description of the system of adding this special kind of plaster is found in Bharata's *Nāṭya-Śāstra* with the description of the instrument *mṛdaṅga*. The system of playing the *avanaddha* instruments after tuning them is also quite old. Bharata has described the process of tuning the *svara* of two heads of the *mṛdaṅga* as *mārjanā*. Thus with the increase of resonance in *avanaddha* instruments, the sound became more effective. The *avanaddha* instruments with coating of plaster were therefore considered to be the best.

From ancient times, the shape of *avanaddha* instruments has remained short or long, high or low, etc., as per requirements. Only the

pattern and material have remained changing. In olden days, *avanaddha* instruments were made out of clay. But gradually wood came into use in the place of clay. Thereafter the metals like iron, brass, etc., came into use in making *avanaddha* instruments. Even today we see *avanaddha* made out of clay, wood, iron, brass, etc.

All the drums like *mṛdaṅga*, *bherī*, *paṭaha*, *huḍukka*, *ḍamarū* etc., as they will be studied later, fall under this category.

3. *Sushira* instruments - After *ghana* and *avanaddha* instruments, *sushira* and *tata* instruments came into existence. *Sushira* instruments are those which produce sound through wind. In the past humans have tried to produce sound by keeping conch-shell, horn of animals like buffalo, etc., on mouth. A mega-phone-shaped horn like device may have been initially used to amplify sound. From such devices gradually arose instruments of the horn-group like the ones observed in sculpture of Myanmar and Cambodia (pl.35,43).

From ancient times, such *sushira* instruments of horn-group have been used to produce sound on different occasions. As for example, conch-shell and other horn instruments were played for giving signals to summon an army, to announce important events and to issue public invitation for festivals and processions. They were either played in isolation or in accompaniment with the instrument like drum and gong. Moreover the instruments of horn-group possess a hoarse sound and they cannot produce many notes. Therefore the instruments such as conch-shell, horn etc., were

used only on festivals and other ceremonial occasions and on the battle-field. The references to the flute is found in inscriptions dating before eleventh century in Thailand. The sculptural representation of the flute are also seen in the carving of Borobudur and Champa. The flute must have developed from the idea of producing the necessary current of air through the mouth and then blowing it through a bamboo. In the flute, there are finger-holes or 'stops' by which the player can produce both high and low notes. Thus the flute is a melodious *sushira* instrument. There are many varieties of flutes in which sometimes the number of finger-holes varies or sometimes the length varies. The *sushira* instruments of the flute types are sounded by a stream of wind throwing from the player's lips directly. This wind stream sets up waves in the air current when it passes through the edge. The tonal quality is affected by the shape of air column. Pitch is controlled by varying the wind pressure or by changing the tube's effective length, and in many cases by opening and closing finger holes.

In Southeast Asia before eleventh century the conch, the flute, the horn and the bamboo mouth organ discussed earlier can be classified under *sushira* instruments.

4. *Tata* instruments - *Tata* instruments are those in which sound is produced by plucking the strings with fingers or plectrum or bow.

Looking to the history of the *tata* instruments, it seems that the hunter's bow must be the first *tata* instrument invented, as the bow-shaped *vīṇā* is found frequently represented in the sculptures of ancient period.

Thus the revaberating sound produced by pulling the gut string of the bow might have given way to making the bow-shaped *vīṇā*. Primitive type of *vīṇā* was probably made by fastening strings made from intestines of wild animals to the bow-shaped body.

Tata instruments are also known as chordophones and they are made of string like silk, wire, hair and gut. *Tata* instruments of the Zither family have strings tied in a frame over an amplifying or resonating chamber that receives their vibrations indirectly. In the harp type of *tata* instruments, strings are tied directly to the amplifier at one end. The guitar *vīṇā* type of *tata* instruments have a narrow neck with strings coupled by a bridge to body. The strings run along the neck to tunings pegs. The neck supports a finger-board against which strings are pressed to shorten their vibrating length. In the case of harps like *tata* instruments, we find absence of neck. The body has two arms connected by a cross bar, to which strings are tied for tuning. Strings can be sounded by plucking, striking, bowing or by passing breeze.

Among the *tata* instruments mainly three types were observed in Southeast Asia before eleventh century : the harp type *vīṇā*, the guitar *vīṇā* and the gourd *vīṇā*.

D) The Orchestra

From the ancient times different types of musical instruments were combined and played together. In India the combination of various classes

of musical instruments was fairly well prevalent even before the Christian Era such combination are seen on the early sculpture of Bharhut and Sanchi. Bharata in his *Nāṭya-Śāstra* also has described types of combination of different musical instruments. Playing of various classes of musical instruments is called orchestra.

It is not possible that the region of Thailand remained unaffected by such developments in India proper. On the Dvaravati stucco we see two kinds of musical instruments *tata* and *ghana*. This is a very simple form of orchestra but it can be said that the people in this region also learned to combine different classes of musical instruments. It will be seen in the course of the study that even wider classes of musical instruments were put together before eleventh century which can be seen from the inscriptions of Thailand and the sculpture of other countries of Southeast Asia.

On the whole it can be said that, very simple form of musical instruments like lithophone and other striking instruments were played during the prehistoric time. This includes the bamboo instruments of *ghana* and *sushira* varieties also. The coming of the bronze age saw development of important and to an extent sophisticated instruments like the *Mahoratuk* and *gong*. These instruments are widely used even today. The beginning

of Indianization from first century A.D. brought number of musical instruments from the Indian subcontinent. The three types of *vīṇās* : The harp or bow type *vīṇā*, the guitar type *vīṇā* and the gourd *vīṇā*; numerous types of drums like the *mṛdaṅga*, the *bherī*, the *ḍamarū*, the *paṭaha* etc., the cymbals and clappers of different varieties; the flute, horn and the conch. These instruments equally spread in almost all parts of Southeast Asia. They contributed greatly to the later developments of musical instruments of the region. In fact the instruments used in Southeast Asia before eleventh century includes in great bulk the ones that came from India.

INDEX

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²B.V.A. Peacock. "A preliminary note on the Dongson Bronze Drums from Kompang Sungailang Federal Museum." *Journal Vol. IX, new series* .1964, p 1-3.

³The Dong-son culture which dates around 300 years before Christian Era, at Thank- Hoa on the right bank of Song-ma river and at the south of Daeng river in the north Vietnam.

⁴Chin Yudi. "Klong Mahoratuk (Bronze drum)" *Journal of the Archeology Faculty*, vol 2, no 4, (April-June 1969),p 13-30.

⁵Ibid.

⁶Ibid.

⁷Ibid.

⁸Ibid.

⁹Khemchat Tepchai. *Encyclopedia of Southern Thai Culture*. Vol I. (Bangkok: Amrin printing, 1986),p.65.

¹⁰Ibid.

¹¹Ibid.

¹²Ibid.

¹³Ibid.

¹⁴Fine Art Department. *Muang Ubon Ratchathani*. (Bangkok : Amarin printing, 1959), p. 136.

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¹⁶Interview, Phiraphon Phisanphong. Fine Art department, February 1st, 1992.

¹⁷Ibid.

¹⁸Fine Art Department *Rock Cave Painting at Kanchanaburi*. (Bangkok: Amarian printing, 1984), p.37.

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²⁰Ibid.

²¹Phiriya Krailoek. *Encyclopedia of Southern Thai Culture*. Vol VI. p.2383.

²²Ibid.

²³Ibid., p.2384.

²⁴Ibid., p.2385.

²⁵Momrajawong Suriyawut Sukhsawat. *Lintels of Thailand*. (Thaplang Nai Thailand), (Bangkok : Akson Samphan Press, 1988), p.28.

²⁶Ibid., p.30.

²⁷Ibid., p.44.

²⁸M.C. Subhadradis Diskul. *Art in Thailand*. (New York : The Metropolitan Museum of Arts, 1960), p.3.

²⁹Hong Kong Musuem. *Sculpture in Thailand*. (Hongkong : King Printing Concentric., p.1982), p.108-109.

³⁰Chawiwam Wiriyabut. *Coin in Thailand*. (Bangkok : Karnsasana Press, 1973), p.16.

³¹Ibid.

³²Song played using this lithophone was recorded by French scholars and is presently kept at Guimet Musuem, France.

³³*The New Encyclospedia Britannica*. Vol.17, p.238.

³⁴Ibid.

³⁵Dhanit Yupho.*Thai Musical Instruments*. p.61.

³⁶Ibid., p.62.

³⁷Ibid., p.64.

³⁸Khemchat Tepchai., *op.cit.*,p.64.

³⁹Ibid., p.71-72.

⁴⁰Ibid.

⁴¹Ibid.

⁴²*The New Encyclopedia Britannica*. Vol. 17., p.238

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⁴⁴Benjamin Walker. *Hindu World*. Vol.I. (India: Indus, 1995), p.47.

⁴⁵Ibid.

⁴⁶Swarnakamal Bowmik and Mudrika Jani. *The Heritage of Musical Instruments*. (Baroda : The Museum and Picture Gallery, 1990), p.32.

⁴⁷Thakur Jaideva Singh. *Indian Music*. (Calcutta: Sangeet Research Academy, 1995), p.23.

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Chapter III

Analysis of Music and Indian Influence on it Based on Inscriptional Evidences.

Epigraphical source has proved to be very important in the reconstruction of history of music. Unlike books or other documents written on perishable materials, these inscriptions, being engraved on stone and metal, preserved better. Their value as contemporary records thus remain more or less permanent. These stone records are the static representations of the dynamic art in as much as they contain valuable information regarding the visual demonstrations of music and dance, staged during daily rituals annual festivals and in temples etc. They form an authentic source to assess the status and function of the art of music and dance in society, the extent of patronage extended to these arts by kings and chieftains of different dynasties during different periods. The contributions made by the epigraphical records serve to complete the process of evolution of music. With the help of the dates given in these stone documents and with the aid of the paleographic evidences of the same, it is possible for us, to some extent, to maintain a chronology of historic concepts and landmarks in the evolution of music. Besides the music itself other inferences about society, culture, customs, administrations, religions, interaction among people etc., can be made from these inscriptions regarding music.

In Thailand most inscriptions were discovered from central and the northeastern parts. Almost all of these inscriptions belongs to the Khmer

kingdom of Angkor. The inscription except the one found from the area of Dvaravati are written in Sanskrit - Khmer languages using Pallava, post Pallava and Khmer letters. The inscriptions found from the region of Dvaravati are in archaic Mon language but use Pallava letters. Most of these inscriptions were engraved by kings or chieftains regarding donation made to villages or offerings to god.

A : Inscriptions and their Translation.

1. The Inscription of Tham-Narai : found from Phra Phutthabat, Saraburi, central Thailand and is dated seventh century A.D.¹ There are inscribed three lines in ancient Mon language using Pallava letters.

The inscription describes the celebration on the consecration of idol of a deity by the king's delegate Po-lung Sinadha and the villagers in the kingdom of Anuradhapura. The celebration consisted of singing and dancing.

Inscription

1. *kamun anurādhapura ko a ka (tan) kundarijūn jih.*
2. *ranleh komañah ḍāñ pa a (p) tanāy sinādha.*
3. *h monah toy lopaday · vo a*

Translation

Kundarijan who established Anuradhapura kingdom sent Po-lung Sinadha and people in this town to arrange a singing and dancing ceremony to celebrate the consecration of the idol.

2. The Inscriptions of Phaenthongdaeng U Thong : found from U-Thong, Suphanburi, central Thailand, dates back to eighth-ninth century. The inscription is on 28 x 42 x 2 cms rectangular copper plate and in Sanskrit language using Post Pallava letters².

It says about king Harshavarman offering dancers musicians and other valuables to Shiva.

Inscription

- | | |
|-------------------------------------|----------------------------------|
| 1. <i>ākirṇṇā kirtti puñjasya</i> | <i>rājñas śrīśāna varm maṇah</i> |
| 2. <i>naptā śriharsha varmmās</i> | <i>labdhasihāsanaḥ karmāt</i> |
| 3. <i>nritta tṛiryyādisaṃpannām</i> | <i>sivikām ratnāḍiṛishitām</i> |
| 4. <i>sa sātapatrām prahino-</i> | <i>ca chrīmadmrātakeśvare</i> |
| 5. <i>paścāc ca śāmphavakośam</i> | <i>varūprakaraṇairyyatam</i> |
| 6. <i>sa śrīdhāreśvare dadyā</i> | <i>nnātyagītādisaṅkalam</i> |

Translation

King Sri Harshavarman, the nephew of the famous and venerable king Sri Isanvarman came to throne.

He offered palanquin decorated with jewels, dancers and musicians to Srimatamaratkesawara.

After that he also donated (various) articles and a group of dancers and singers to worship *Shivalinga* which represents Sritharesavara.

3. The Inscriptions of Hinkhon I : was found from Pak-thong-chai, Nakorn Ratchsima and dated eighth-ninth century. The inscription is written in Sanskrit-Khmer languages using post Pallava letters, on four sides of a 40 x 30 x 100 cms. pole. One side has 12 lines in Sanskrit, the other side has eight and eleven lines in Sanskrit and Khmer respectively, the third side has 19 lines in Khmer and the fourth side has 18 lines in Khmer language³.

The inscription on the first and second sides tells about the Ratchabhikshu who built four *semās*, *vihāra* and donated many articles to a temple. The fourth side mentions that Ratchabhikshu was a prince and that he donated land for the temple.

On the third side, there are names of various articles that were donated to temple, conch is one of them.

Inscription on the third side

1. . yā 1 praddān kalaśa śaṅkha dro ... la
2. ṅgā 1 carā dhupa . kaśa . ārnna 1 taṃ pañña daṃ
3. riṇi moy salā teṃ 20 sre bre sanrey tau ta
4. gi tnalla lvoḥ jassa aṃrāt ti jeṇi vihāra
5. - 100 tmur tap danem snāṇ yār ...

Translation

... donated jug, conch, *carā* (a container of) camphor ... *gadā*, a garden of 20 palms, two *sanrey* farms since ... road until ... temple ... 100 cows ...

4. The Inscription of Hinkhon II : this second inscription is on three sides of a 32 x 21 x 80 cms. pole and is written in Sanskrit and Khmer languages. The inscription describes making articles and offering them to a temple to earn merit in order to get a place in heaven. On the first side conch as the musical instruments is mentioned⁴.

Inscription on the first side

10. ... *yārāmi kaisa* ...
11. ... *tyaka śaṁkhavādyapa* ...
12. ... *pānādibhiḥ bhūyas sarvva* ...
13. *yakṛivān pañcatrayastobha* ...

Translation

(There was a quarrel between) *yārāmi* (who was a gardener or an attendant in temple) ... the musical instrument conch and singing

On the second side cymbals and conch are mentioned in lines 12-18⁵.

Inscription on the second side

12. ... *tata vodi vrahmarudhira*
13. *kalaśa carā dhūpa* ...
14. *pon samrukk ñaṇ mo*
15. *.kk kaṇsatāla piy samṛi (t)*
16. *śaṅkha piy uten neḥ*
17. *ampalla paribhoga (v) raḥ*
18. *kammarateṇ añ.*

Translation

12 - 16 ...*wothi Phrom Ruthira*, bottle ..., *carā* (contain scented substance or camphor) ... three cymbals, two conches ...

17 - 18 ...all of these for offering to Phra Kamarateng An.

5. The Inscription of Ban Tat Thong : found from Ban Tat Thong, Yasothorn, northeastern Thailand, it is dated 10th century. The inscription is in Sanskrit - Khmer languages using ancient Khmer letters, on two sides of the 45.5 x 54 cms. red sand stone *sema*⁶.

The details praised Shiva and King Harshavarman I (Rudraloka posthumously) the Khmer king who ruled between 911 - 925 A.D.⁷ It mentions about the king presenting, the prince who married his daughter, with many valuable gifts. Nearing the end inscription tells that the prince was from Bhavapura kingdom, and about Brahmin Nilkantha who worshipped *Shivalinga* everyday.

The details in line 13 - 16⁸ describe about donation of musical instruments, singers, musicians, fragrance, flowers etc.

Inscription

13.	<i>bherīvādyāgandharvaṃ</i>	<i>gandhakaṃ pushpa citraṃ vā</i>
14.	<i>pūjātarishkāla ityuktaṃ</i>	<i>tasmāt sārassavatindadāt</i>
15.	<i>rudraloka tathā rajyaṃ</i>	<i>bhūmiṃ samrakshitaṃ kulaiḥ</i>
16.	<i>prasādaṃ bhūpatervāla -</i>	<i>putri sārassavatindadāt</i>
19.	<i>nṛitagita pada kālaṃ</i>	<i>liṅgaṃ bhaktayā dine dine</i>
20.	<i>śrīnilakantheti khyātaḥ</i>	<i>seve vaiprahutivit ...</i>

Translation

13 - 16 ... (and offered) musician playing the instrument *bherī* (a drum), incense, beautiful flowers to (idol of mother) so that they can be used in all the three worlds ...

19 - 20 ...(the officiating priest) Sri Nilkantha worship *linga* everyday with dancing and singing and sacrifice to it.

6. The Inscription of Sadokkokthom II : found from Prasat Muang Phrao, Sa Kaeo, northeastern Thailand dating 1052 A.D., is inscribed in Sanskrit - Khmer languages using archaic Khmer letters⁹. The inscription is on four sides of a 43 x 191 x 32 cms rectangular slate pole. It praised king Uttayadityavarman II and documents the extent of patronage to the religion extended by the kings. It says about Purohita brahmins, religious leaders who were king's advisors and a media between god and the king. The detail emphasis on pass-on of such key post of chief priest to

only brahmins and born of the woman of the same family as the predecessor;¹⁰ a tradition prevalent among some contemporary communities in south India.¹¹

There are names of musical instruments, in line 28 - 31,¹² donated by king Uttayadittayavarman to a temple.

Inscription

29. *Sabhūshottamanārīṇām tantrī dāliyujām śatam
vīṇādināṇi saveṇunāṇi śataṇ svaraimanoharam*
30. *Kaṇṣatālamṛdaṇḍigāditūryyāṅgānāṇi śtārddhakam
dāsādasīśahasreṇa trayo grāmāḥ prapūritāḥ*

Translation

29. A group of 100 women laden with jewels playing *vīṇā*, 100 *vīṇās* and melodious flutes ...
30. (50 other musical instruments like) cymbals, *mṛdaṅga* (the drum) etc., musical instruments, male and female servants, three prosperous villages ...

7. The Inscription of Prasat Hin Phanom Wan II : found at outer gate pole south of Prasat Hin Phanom Wan, Ban pho, Nakorn Ratchasima, northeastern Thailand, dates back to 1055 A.D. There are 45 lines in Sanskrit - Khmer using ancient Khmer letter, on one of the rectangular sides of the pole.¹³

The details of inscription manifest king Sri Suryavarman I and honour a brave soldier named Viravarman. It says that the king had Viravarman's statue build and offered him land, servants, maids, cattle animals and a temple. The inscription talks of king Sri Uttayadittayavarman II, king Suryavarman I's predecessor, as a very capable and famous king, and about his restoring 23 villages. After restoration the king had taken out procession and performs rites to celebrate the occasion. Among the precious objects mentioned are diamonds, gems, pearl, gold and conch.

Inscription¹⁴

27. *parito ... sadā sarvavān grāmān matpunyam
eva ca ataḥ param tu rājye śri udyāditya
vamma (ṇaḥ)*
28. *(yasya bha)ktis ... vaddhā prakītā kathilā ... traivimśati
grāma ti māna yatna viṇ cat nakti muva ... ksha ...*
29. *... krita ... jya gi vraḥ travān ti mahimā pi chloṇa
... sa*

30. *myath dukvraḥ sulaksha nuvalagna pi coṇ ...*
ṇa vanam ... valakā psam vraḥ kriyā ...
31. *vraḥ mātra srac manti lamtap nu vijita agra vraḥ*
Oy tranakti leṇ vraḥ sthira rāmya sampat Oy cantrani
32. *la nu sumila pushparāga vaiḍūryya vajra mahimā gi*
ta nāya ratna śaṅkha pravāla marakaṭa nu mukta
tadai sau
33. *varṇa rupya ta pravai gi ta jā supātra man vraḥ*
danle tagi thve nu kule ta yukti dukpātra suracam pi ...

Translation

27 - 30 (these lines say about restoring 23 villages in 22 *gathas*)

31 - 33 ... a large pond, celebration with procession and rites and valuables like diamonds, gems (dark coloured precious stone, topaz, green gems etc.), conch, emerald, pearl, gold and silver.

8. The Inscription of Prasat Hin Phanom Rung III : found at Prasat Hin Phnom Rung, Nang Rong, Burirum, northeastern Thailand, dates around eleventh century. The inscription is on 33.5 x 70 x 18 cms, rectangular pole, in Sanskrit - Khmer languages using archaic Khmer letters¹⁵. The inscription is believed to be engraved in the reign of king

Jayavarman V (Phra Bat Barom Viralok . posthumously) between 968 - 1001 A.D., from 'Sri Jayavarmanmadeva' on the second side, line four¹⁶.

The inscription says that the king Rajendravarman came to throne in 944 A.D.¹⁷ He donated land, servant and other useful articles to temple. The details about donation of musical instruments are on the second side of the inscription in line 13.¹⁸

Inscription

13. *yvaṇa 10 sārī 4 tūryā 4 ...*

14. *esaḥ 4 vraḥ panacanla*

Translation

... 10 (*sārī*) 4 musical instruments, 4 ... 4 horses.

9. The inscription of San Chao Muang Lopburi : found from Lopburi, central Thailand, dates around eleventh century. There are 28 lines in Khmer using ancient Khmer letter on one of the side of 28 x 120 x 32 cms., rectangular sand stone pole.¹⁹

The details inform about offering land, servants and other objects to Phra Barom Vasuthep or Vishnu. The lines 9 - 12 say about dancers,

singers and musicians (pluckers and fiddlers) that were offered for worshipping the idol.²⁰

Inscription

9. *ruva kalpanā añña o ruva vraḥ kaṃluṇ sru (k)*
10. *lvo ta māna rmmāṃ camryaṇ kalpanā rmamāṃ
camrya (ñ 1)*
11. *thmini 1 thmoni 1 pamre ta vraḥ kamrateni añ*
12. *paramavāsudeva pratidina o phle sruk vdāni*

Translation

9. (Monks in Lavo Kingdom) offer ...
- 10 - 12 (I) offer one dancer, one singer, one plucker, one fiddler to worship Kamarateng An Sri Barom Vasudeva everyday ...

The epigraphical sources from other countries like Cambodia, Champa, Java etc., are vast. As seen earlier the inscriptions of Angkor empire are in Sanskrit - Khmer languages. The inscriptions of Champa are in Sanskrit - Cham and the inscriptions from Java use Sanskrit and

Javanese. Many scholars have attempted to translate the inscriptions. It is a tedious job to observe names of musical instruments from such a vast pool of the inscriptions. Many a time the translators omit the details like names of musical instruments and summarize the translation in short. Nevertheless there were found number of musical instruments especially from the inscriptions of Cambodian region. Thailand being a part of the Angkor empire these inscription cannot be ignored as they contain valuable information not documented by the inscription found from Thailand proper. A few of such inscriptions found from Cambodia and inferences drawn from the inscriptions of other countries are as follows.

10. Prah Ko Inscription of Indravarman:²¹ it is engraved on a stele in the temple of Prah Ko in the Roluoh group in Siem Reap, Cambodia, dates 879 A.D. It is written in Sanskrit and contains 40 verses. After an invocation to Shiva the inscription refers to king Indravarman, who became king in 877 A.D. and gives his genealogy. Then follows the eulogy of the king who installed three statues of Shiva and three of *Devī* in 879 A.D. Then follow the donations and the usual imprecations.

The verse 35 mentions musical instruments, dancers, singers, etc., donated by the king Indravarman.

Inscription

35. *Vīṇādivādyavādinyī veṇu talāvisārādāḥ,
Puruṣā rūpiṇaś ślāghyā narttanādivisārādāḥ*

Translation

35. Many beautiful dancing girls, girls versed in vocal and instrumental music, skillful in playing the *vīṇā* and other (instruments), and well versed in flutes and *tāla* (cymbals).

11. Prah Einkosei inscription of Jayavarman V ²² : found at Prah Einkosei temple in the town of Siem Rap, Cambodia, dates back to 978 A.D. The inscription, engraved on a stele, is written partly in Sanskrit and partly in Khmer. The Sanskrit portion, which is divided into three parts, contains forty verses and about 20 lines more containing a few words of other verses.

The inscription refers to king Baladitya of Aninditapura of the race of Soma and Kaundinya. The rest of the inscription mentions the religious foundations of Indralakṣmi, daughter of Rajendravarman, and her husband, Brahmana Divakarabhatta, born on the river Kalindi (the Yamuna in India).

In the verse seven number of musical instruments are mentioned.

Inscription

7. *Paṭupaṭahasumiśrairllāllarikaṇṣatālaiḥ,*
Karaditimilaviṇāvenughantā mṛdaṅgaiḥ.
Puravapaṇavabherīkāhalānekaśaṁkhai,
Rbhayamkr̥ta ripūṇām̐ (yas sada va)
ddasaṁghaiḥ

Translation

... (Clever)...*Paṭaha*, (a drum) mixed (with the sounds of) *lāllari* (a drum) cymbals, *karadi*, *timila* (drums), *viṇā*, flute, bell, *mṛdaṅga* (a drum), *Purava* (?), *Paṇava*, *bherī* (drums), *Kāhal* (a wind instrument) and conches, with all these instruments (he) caused fear in (his) enemies.

R.C.Majumdar in his study about Champa observes that ²³ “The Chams were very fond of dance and music. Inscriptions frequently refer to dancers and musicians and the bas-reliefs depict many dancing and musical parties together with a variety of Indian musical instruments. There were probably also some dramatic performances in which men and women both took part, and some heroic ballads were sung to the accompaniment of suitable musical instruments.” From sculptures and inscriptions, he notes instruments like the flute, the guitar (type *viṇā*), the lyre (bow type *viṇā*), and Bharata era *mṛdaṅga* (chapter IV).

In his study about ancient civilization of Indonesia and Malaysia Himanshu Bhusan Sarkar writes²⁴, “The foundation ceremony was attended with consecration of the sacred stone and there were merry-making, jesting feasts, drinking of wine, dancing etc. The buffoons regaled the assembled people on such occasions and masked-player possibly participated in acting or dancing to the tune of gamelan (Javanese : Percussion instruments) and other music. The inscription of Tru, dated 842 A.D. refers to a *(ma)danggi*, who appears to be the same as *mrdangin* a kind of drummer known in India by the same name.” From various inscriptions he observes instruments like ... *merdanggas* (*mṛdaṅg*), *Padahas* (*paṭaḥa*), *Śangkas* (*Śankha*), *tarayans* (*tūrṇyā* or trumpets). Interestingly he notes of *rāvaṇahasta* from the plates of Mantyasih dated 917 A.D. He says that *rāvaṇahasta* were musicians who measure time in music by striking palms of hands but Thakur Jaydeva Singh in ‘Indian Music’ writes that *rāvaṇahasta* is an ancient fiddling instrument of India²⁵. The *tāla* indicators on the other hand were called *Pānika*. The musical instruments used by the Javanese are elaborately depicted in the carvings of Borobudur. They are dealt with in detail in the next chapter.

B. Analysis of the Musical Instruments.

Dancing, singing and music have always been part of human expression. As already seen in Chapter I, bamboo and bronze instruments were present in the region of Thailand even before the Indian civilization started to extend in Southeast Asia. Indian music, dance and singing was

predominantly religious. As the religion came to be associated with monarchy and dynastic traditions, the mention of music and musical instruments in the inscriptions engraved by them are obviously Indian.

The inscription of Tham-narai mentions the consecration ceremony that consisted of singing and dancing. Saraburi from where the inscription was found falls in the region occupied by the kingdom of Dvaravati. The deity mentioned can be Hindu or Buddhist. Thus the singing and dancing ceremony must be under the influence from India.

The inscription of Phaenthongdaeng U-Thong talks about donation of dancers, musicians and singers to Shiva. This shows that as in India the music was an important part of worship. The musical instruments used by the musicians mentioned here can safely be assumed as the instruments that came from India; perhaps, the *vīṇā*, the flute and the drums.

Hin khon I inscription dated eighth - ninth century mentions conch among the list of articles donated to a temple. The other articles donated along with the conch are ones that were used for worship like *dhupa*, *kalaśa* etc. Hence, the conch here is perhaps an auspicious object or was used to pour libations. However, the inscription of Hin Khon II clearly mentions '*Śaṃkhaṇḍyapa*' meaning, the musical instrument conch. Thus it is clear that conch was blown during the worship in temples. On the second side of the same inscription three cymbals (*kaṇṣatāla*) and two conches are among the donation made to Phra Kamarteng An.

The inscription of Ban Tat Thong notes a drum called '*bherī*'. It is a large size circular or cylindrical drum which was struck with long sticks or clubs. These are among the offerings made to 'the idol of mother'. The musical instruments named in the inscription of Sadokkokthom II include (100) *vīṇās* and flutes (*veṇu*), cymbals (*kaṇṣatāla*), *mṛdaṅga*; one of the most popular and widely used of the contemporary drums in India. More instruments were donated by king Uttayadittayavarman than the above mentioned as the inscription at the end of the list of musical instruments says '*āditūryyā*' meaning, 'etc. instruments'. Again, the inscription of Prasat Hin Phnom Rung III among the list of offerings made to a temple, four musical instruments (*tūryyā*).

The San Chao Muang Lopburi inscription mentions one plucker and one fiddler (*thmin 1 thmon 1*) and the plates of Mantyasih from Java note of *rāvaṇahasta* which show that not only plucking instruments were used but fiddling instruments like the violin were in use. However, they do not seem to have been very popular as it was the case in India. A.L.Basham in 'Wonder that was India' opines "Bowed instruments may have been known, but seem to have been little used in polite circles until the coming of the Muslims."²⁶

The Prah Ko inscription of Indravarman (879 A.D.) mentions *vīṇā* player, the flute and the cymbals (*tāla*). The musical instruments discernible from the inscription of Prah Einkosie (978 A.D.) are : *paṭaha*, a drum like the modern *ḍholaka*; cymbals, *vīṇā*, flute, bell (*ghaṇṭā*),

mṛdaṅga; *paṇava*, an hour glass shaped drum in which there was a hole in the middle of the body of the instrument and three strings were laid from one side to the other; *bherī*; *kāhala*, a wind instrument like modern *shahnāi*, *śankha* the conch and *karadi* and *timila* the ancient drums of the Tamils mentioned even in the second century classic *Silappadikāram*.

Mahesh Kumar Sharan in his study about ancient Cambodia observes²⁷, 'Dancing girls were experts in dance and also in playing musical instruments like *viṇā*, *duṇḍubhi* and *tāla* the people showed a good deal of interest in playing musical instruments like the *paṭaha*, the *viṇā*, the *ghaṇṭā*, the *bherī*, the *mṛdaṅga*, the *paṇava* and the *kāhala*'. Except for the *duṇḍubhi* these are the same instruments that we have already come across. *Dundubhi* was a drum like the present day *nagārā* of northern India. It is popular in India since ancient time. It will be seen in Chapter IV that the drum was used right from the time of the Vedas.

Classifying the musical instruments found from the inscriptions : the *tata* or chordophonic instruments includes the *vina* and the fiddling instruments. *Ghana* instruments are cymbals and bell. *Avanaddha* or membranophonic instruments would encompass the drums like the *bherī*, the *mṛdaṅga*, the *paṭaha*, the *paṇava* and the *duṇḍubhi*. And the *sushira* or aerophonic instruments will comprise the flute, the *kāhala* and the conch. All of these instruments are among the contemporary musical instruments used in India. As it will be seen in the course of study, there are numerous references to these instruments in ancient Indian literature as well as most

of these instruments are profusely depicted in Indian sculptures and paintings. A detail description of all the above mentioned instruments is given in the next chapter.

C: Music, Society and Indian influence

As discussed earlier Indian art and music were predominantly religious. Religions like Hinduism and Buddhism brought with them a host of religious practices which varied from daily worships to annual festivals. Different type of musical instruments were played during different occasions and the instruments as well as the practices were directly borrowed from India. The inscription gives valuable information regarding where, how, and when the music was played. The use of music was not only limited to the religious practices but music was also played during a number of ritualistic ceremonies, festival occasions, royal processions, entertainment etc. The following is an attempt to reconstruct the use of music through the ages based on the inscriptions and Chinese records.

1. Music in religious practices.

Right from the beginning, the concept of Indian music is an integral part of religion. The study of the evolution of religion reveals that the use of music in religious rites and ceremonies all over the world was not only common but necessary. The reason is obvious by music alone could, such rites, ceremonies and worships be amplified and prolonged, and could certain feelings of dedication, self surrendering and atuning oneness, be

aroused and sustained in masses and individuals. It is believed that the concept of music is an art and through its aesthetic and spiritual process, one can reach to the trance, upliftment and ultimately merged into the divinity and godliness.

The concept of '*Satyam, Shivam, Sundaram*' also depicts the art of music (or any art form) at its culmination which glimpses of eternal truth, beauty and divinity.

It may be the earliest chants of Rig-Vedic hymns, or the music of *Sāman (Sāmaveda)*, the period of 'tune and music' or recitation or singing of *Gāndharvaveda*, divine reverence or the music of '*Mārgi Sangit*' or the devotional music of India suggests the close interrelated culture of music and religion. The ancient music of *Mutt-Bani, Shiva Mutt, Kālināth Mutt, Bhārat Mutt or Hanumān Mutt*, till the music of the middle ages and to the present day *Haveli-Sangit* all are basically interrelated with religion. Even in the Karnatak *Sangit* of south India, the soul has expressed itself through its characteristics musical system. *Sangit* (music) has been recognized as a path to the realization of god.

With the development of music in India and elsewhere, as its integral part, the musicians with its related musical instruments accompanied the divine celestial music.

So much so that in the concept of music in India, it is remarkably witnessed that in the ancient monumental temple architecture,

'*Naṭamanḍapas*' as its most essential part of temples, are constructed. This was mainly used for the devotees for singing their prayers and the devotional music accompanied by various musical instruments for the dedication and revelation. Thus from the most remote past Indian music has remained the inseparable aspect of religion.

Before the coming of Indian civilization to Southeast Asia the aboriginal natives practised tribal religion. Such cult must have worshipped spirits, fire etc. The worship can be assumed to have accompanied by primitive form of instruments. These musical instruments may have been like the *Mahoratuk* and the bamboo instruments discussed in Chapter II. However due to the lack of more evidences it is difficult to say much about it.

Reconstructing the history of the use of music in Hindu and Buddhist practices is comparatively easier as we can depend upon the parallel between those of India and Farther India. It can be seen that most inscriptions refer to offering of musical instruments, musicians, singers and dancers to a temple or a deity. The inscription of Phaenthongdaeng U-Thong mentions the donation of a group of dancers and singers to worship Shiva. The inscription of Hinkhon II notes the donation of cymbals, conch etc., to a temple to earn merit in order to get a place in heaven. The Ban Tat Thong inscription records the donation of musical instruments and musicians to the idol of mother. Hundred *vīṇās*, melodious flutes, cymbals and *mṛdaṅga* etc., are among the offerings made by the king Uttayadittayavarman to the temple mentioned in the inscription of

Sadokkokthom II. The inscription of Ban Tat Thong also talks about Brahmin Nilakantha who worshipped *Shivalinga* everyday with dancing and singing. From all these inscriptions it is clear that as in India the musical instruments were a part of the daily worships in temple. The conches were blown and the drums were beaten to awaken the divinity in temple. The worship with chants after that must have been accompanied by playing of the drums, *vīṇās*, flutes, cymbals and blowing of conch intermittently as even today. Singing and dancing also accompanied the worship as it was considered superior form of worship.

Along with the instruments male and female musicians, dancers and singers were also offered in the service of god in temple as the inscription of San Chao Muong Lopburi notes offering a dancer, a singer, a plucker and a fiddler to worship Vishnu, the inscription of Sadokkokthom mentions of a group of 100 women for playing *vīṇā* and the Prah Ko inscription mentions beautiful dancing girls, girls well versed in vocal and instrumental music donated by the king Indravarman. Such practice of offering men and women to the service of god is known from India. From the time as early as that of Cholas such practice of assigning dancers, musicians and singers with the duty of performing ritual worships is known. They are called *devadāsīs* or *devarāḍiyār*.²⁸

Religious festival and celebration are occasion of happiness and the expression of happiness must be through dancing on the beats of rhythmic music. The inscription of Tham Narai describes the celebration on

consecration of the idol of the deity. The celebration included dancing and singing. The inscription of Prasat Hin Phnom Wan II notes celebration on the occasion of restoration of 23 villages. The celebration must have seen playing the drums, trumpets and conches. The music in temple the celebration on auspicious occasions were sponsored by the kings or chiefs. The inscriptions found from the temple not only tell us the history of that 'devasthān' but also the activities conducted in the temple. People gathered in temples for many activities such as singing, dancing, music, preachings etc. The building of temples and carving of idols obviously encourage the craftsmanship. Some of the inscriptions found from temples also record the payment made to *Pandit*, cooks, musicians, dancers, sweepers, accountant etc. There are also records of expenditure on celebration and repair of the building of the temple. Hence the musicians and dancers were not only donated to temple as servant but in some cases they were also paid for their services. The temple in south India also followed these tradition : music of some sort accompanied the ritual in temple; the temple retained musicians who were paid for their services in the temples.²⁹

The inscription of Sadokkokthom II further informs about the donation of land to Brahmin who laid foundation of a village society on it. A temple was constructed and the king offered 200 servants including musicians to the temple. Among the musical instruments donated were 100 *vīṇās*, flutes and 50 other musical instruments like cymbals, drums etc. The king also donated 400 carts pulled by horses, 1,000 sharp axes, 1,000

cudgets, lances, 1,000 sacks of milled rice, 10,000 sacks of unhusked rice. The king Uttayadittayavarman gave all these to foster the *devasthān* and people of the village. The weapons were for the protection of the village. The building of temple and giving employment to people of the village in it built strong village community. The Pala king Devapala is also known to have offered revenues of a large village to a temple built by the Srivijayan king Balaputra at Nalanda in (c.860).³⁰ This shows that building temples for fostering village and employing the people for service in it was a practice followed by the kings in India and the practice must have been adopted by the kings of Southeast Asian kingdoms. Something similar is also observed by Professor Coedes.³¹ “The reclaiming of these lands, until then left fallow or scarcely exploited, was effected by the expedient of setting up religious establishments and making grants of unused land to private persons. This resulted in the creation of villages serving the temples and the cultivation of the soil by means of irrigation works.”

Thus music was respected art and musicians and other artists were important people of community. The kings encourage these artists and they were the true patron of the art of music. The inscription on the octagon pillar found from Lopburi dating 771 A.D. mentions the donation of the merit earned from offerings (made to temple) to dancer (and musicians)³²,

1. // vo a puṇaya cāp
2. Dayaṇ ga // riṇdayaya // sa
3. Nghapathāk // kan dam puña //

which also shows the respect with which these artists were held.

Sacrifices were made during Brahminical worship. The inscription of Ban Tat Thong mentions Brahmin Nilkantha who worshipped *Shivalinga* everyday. Food grain, milk, butter, etc., were thrown into the fire even human and animal sacrifices were made. In that case the subject was tied to a pole and its throat was cut with a curved knife. At the same time other brahmins would beat the drums and pray. Besides the deities, sacrifices were also made to fire.

However there seem to be a distinction between the way music was used by the Hindu and the Buddhist. The Buddhist worship consists of meditation and prayer. The meditation need concentration and the musical instruments would disturb it. Hence the music was considered a hindrance in the attainment of *Nirvāṇa*. Nevertheless there were occasions like celebrations and processions where the music used. The inscription of Tham Narai mentions the celebration which included singing and dancing. As Dvaravati was predominantly Buddhist the deity mentioned in the inscription is most probably Buddha. The other occasion for celebration was the attainment of monkhood. A procession was taken out from the man's home to the temple and music was played. On reaching the temple the music was stopped and the rites were performed and the music was played again when the man was declared monk. Such procedure is followed even today.

The musical instruments mentioned in the inscription of the Hinkhon I and II were donated to Hindu temple but the ones who made donation were Buddhists. This was perhaps to settle the discord between '*yarami*'

and member of the other religion. This shows that quarrel between the people of the two religions were settled peacefully. On the whole reciprocal tolerance between Hinduism and Buddhism existed; a phenomenon that was unknown in India itself.

2. Music in ritual

In the description of customs in the kingdoms of the Malay Peninsula Ma-tuan-lin (a Chinese traveller) around seventh century³³ mentions that for the marriages a auspicious hour was chosen. The five days preceding the appointed date were spent in rejoicing and drinking. Celebration on such an occasion must have included playing of musical instruments. The instruments like *vinās*, flutes and drums were perhaps used during the celebration of five days and a procession must have been accompanied by drums and trumpets. The use of musical instruments during marriages is known in India from the very ancient times.

Agriculture was a principle occupation of the people who mainly grew rice. The rain was very important for irrigation of paddy. Hence praying to god for a lavish rain was an important ritual. As we have seen in Chapter II, the *Mahoratuk* was used for begging rain from god. The ritual of rain begging was also known in India. The Brahmins must have performed the rites and sacrifices to the rain god Varuna. The ceremony included playing of the drums, conches and other instruments with dancing and singing.

Ma-tuan-Lin about the customs of Lin-Yi or Champa informs us that whenever a person died his body was carefully wrapped, carried to the shore of the sea or a river accompanied by the sound of drums and by dances and then burnt on a pyre set up by those present. He further says that similar customs were prevalent in Funan. In the description of similar cremation ceremony in the kingdoms of the Malay Peninsula Ma-Tuan-Lin writes³⁴ "Those who have lost their father, their mother, or their brothers shave their heads and wear white clothing. They build a bamboo hut over the water, fill it with small sticks, and place the corpse in it. Streamers are put up, incense is burned, conches are blown, and drums beaten while the pyre is set on fire and the flames consume it." From the *History of the Sui* we also come to know about such ritual in pre-Angkorian Cambodia. It says that the children of the deceased went seven days without eating and shaved their heads as a sign of mourning. The relatives assembled with the monks and nuns who attended the deceased by chanting and playing various musical instruments. All these customs are obviously Indian. Besides these there were occasions like childbirth, thread ceremonies etc., when the conches were blown and drums were frequently beaten.

3. Music in war

Wars and battles among kingdoms were a frequent occurrence. Large size drums were beaten to gather warriors. The use of *Mahoratuk* for the same purpose was already seen in Chapter II. During the war the conches horns and trumpets were blown and drums were beaten³⁵. The drums and conches, were also used to warn the people of impending

danger.³⁶ The use of *bheri*³⁷ for calling warriors to the fray was known in India and similar use of the drum can be assumed for the region of Southeast Asia. The beating of drum and blowing of conch were necessary to maintain the zeal of the warriors. Also all the instruments mentioned in the Prah Einkosei inscription were used to cause fear in the enemy warriors. After war the victory was proclaimed by similar use of the instruments in victory processions.

4. Music in royal ceremonies and processions

From the *History of the Liang* we come to know about the customs of Langkasuka a kingdom on Malay Peninsula. It says that the king left his palace seated on an elephant, shelter under a white canopy, preceded by drums and banners and surrounded by ferocious - looking soldiers. Ma-tuan-lin about the customs of Champa and Funan also says³⁸. "When he (king) goes out he mounts an elephant; he is preceded by conches and drums, sheltered under a parasol of *ki-pei*, and surrounded by servants who wave banners of the same material...." This shows that these instruments were important part of royal insignia and regalia. The Indian Rashtrakuta king Amghavarsha I, of the ninth century A.D., is also known to have possessed drums, battle horns and conches as the royal insignia³⁹. Even Chola kings had the unique conch and drums like the *bheri* along with other emblems that symbolized the sovereignty of the kings. The royal insignia were always under guard and the suzerians took great care in protecting them, especially during wartime. Because, the capture of these implied the surrender of one's kingship and ultimately one's country to the conqueror.

Such instruments in Southeast Asia also were perhaps held with similar respect. In case of *Mahoratuk* we have already seen that it was a sign of the leadership of a tribe. During the battles the opposing armies strived to capture the *Mahoratuk*. The Chinese were known to have captured a number of *Mahoratuk* from the province of Tongkin which perhaps meant the surrender of the tribals and victory of the Chinese.

As the musical instruments were a part of royal insignia and sign of sovereignty they were probably played during royal ceremonies and daily court appearance of kings. The blowing of conch and trumpet during king's entry in court was known from India. Even today the widespread use of musical instruments in Thai royal ceremonies point towards the antiquity of the custom.

5. Music for entertainment.

The primary aim of music is related to entertainment. The primitive humans when feeling happy expressed his pleasure by beating early form of musical instruments, mostly idiophonic. Gradually music came to be associated with number of other rituals and occasions. However, the basic aim of music has not changed till today. The instruments like the *vīṇā*, flutes, drums and cymbals were major ingredients of the music played for entertainment.

A king of Funan named Fan-Chan sent a gift of musicians and other products of the country to the Chinese emperor in third century. The aim of

these musicians must be to entertain the emperor. As indicated earlier kings were great patrons of music which shows that they took considerable interest in listening to and developing the art of music. The Dvaravati stucco depicting women musicians playing musical instruments is most probably seen of such entertainment group. The reliefs of Borobudur at number of times show king enjoying a music and dance. There are also reliefs depicting music concert playing variety of musical instruments.

The people took active interest in dances, singsong, dramas and playing musical instruments. Dancing and music which formed a part of the rituals of the temples were also held on grand scale as was the case of India. During especially festive occasions they provided entertainment to the common people who came to offer worship.⁴⁰ The reference to dramatic performance was also noted in case of Champa. The survival of the *Rāmāyaṇa* and its dramatic performance in whole of Southeast Asia even in absence of proper texts and writings indicates importance of folklore and drama as a medium of propagation of the stories of the *Rāmāyaṇa*, the *Mahābhārata*, the *Jātakas* and the *Purāṇas*. Such a mode of entertainment accompanied the playing of suitable musical instruments. Even in Java 'masked player' participating in acting organization dancing to the time of gamelan and other music were observed.

6. Ethnomusicology

Ethnomusicology is a field which investigates the art of music as a physical, psychological, aesthetic and cultural phenomenon. Implicitly it is defined as study of music in culture.⁴¹

Music performs a variety of functions in a society or a culture : its first and foremost function is emotional expression, music also gives aesthetic pleasure, it entertains and communicates; it functions as a symbolic representation; it enforces conformity to social norms and it also validates social institution and religion. Through all these functions music contributes to continuity and stability of culture and integration of society.⁴²

The relationship between humans and music is same throughout the ages and all the cultures of world. Music on the whole is a product of cultural and ethnic evolution of a society. Music of each culture is different from the other. Music of every culture has peculiar characteristic of its own. Hence the variance in emotions and mode of expression explains the difference in music of each ethnic region. However, as we have seen music of a culture does influence music of the other, thereby bringing a change in the music and musical instruments that are used in a particular culture. For example Thai music that is influenced by Indian music has an altered identity.

Music move us both psychologically and physically. It thus elicits, excites crowd behaviour and channels mob psychology; it encourages physical reaction of the warrior and the hunter. Also it elicits rhythm and physical response of the dancer which may be of prime necessity for the occasion at hand. Music as such influences people to take part in ritualistic or other kinds of ceremonies which is believed to bring order and conformity in society. It is difficult to explain the psychological and physical arousal music had in the past. However on the basis of archaeological and historical evidences certain inferences can be drawn on the kind of music, the purpose for which it was played and the feeling it may have evoked. For example picture of a ceremony, people's activities, music band, musical instruments, musicians, dancers, rhythm of music and the characters of the sound of music; all these have influence in creating different feelings to people in the ceremony.⁴³ The musical instruments in a ceremony such as conch, drum, may indicate grand victories or holy ceremonies and we have already come across the use of drums, conches etc., during war, other procession and funeral which in varying rhythms express excitement pleasure and sorrow respectively.

Different emotions are expressed by different rhythm of music played on different musical instruments. For example the feeling of cheerfulness is expressed with the sounds having quick and close frequency which is not interspersed with silence much. The sound of percussion instruments especially drums played at fast pace express such exhilaration. On the contrary the expression of sorrow is done by slow and spaced sound

units and is inserted with silence. The sound of the flute and the violin express such feeling when played at slow paced rhythm. The Thai folk music consists mainly of percussion instrument especially in the region of central Thailand. This is accompanied by dance and songs which are usually bawdy, humorous and nonsensical. The Thais' preoccupation with percussion instruments like xylophones, gongs, drums and cymbals is also observed in the classical orchestra. These orchestra also include played '*pi-chawa*', an instrument akin to '*shahnāi*', that very successfully expresses sorrow.

A society needs common practices, or proper norms for social unity and peace. Music is a tool that maintain social norms and regulate people's behaviour in society. There are other factors connected with this to enforce social norms such as traditions, beliefs, ceremonies etc. There were many components of auspicious ceremonies in societies according to the religious beliefs. From the epigraphical evidences that we have come across in the previous section we know that Hindus had Brahmin as the leader to perform religious activities. When *devasathān* was built king would assign someone to take care of it. The king would also provide all the necessary articles for *devasathān*. Sacrificing ceremonies and prayer were done everyday. It was believed that by doing this the gods would bless them with power equal to themselves. This was also believed to increase the sanctity of the place. People gladly used to take part in such ceremonies and they have a sense of security, unity and belonging to a specific culture, society, religion and belief. This ensured maintenance of social norms and music was an important element of all those activities.

Buddhists had almost the same ways as Hindus except that the monks were not allowed to play music or use any other fine arts as these were considered part of special occasions and celebrations only and not of religious ceremonies and prayers, while, Hindus along with musical instruments even donated servants and musicians to worship gods. On the whole it can be said that the function of music is inseparable from the function of religion which may perhaps be interpreted as the establishment of a sense of security vis-a-vis the universe.

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Chapter IV

Comparative Study of Musical Instruments of Southeast Asia and India

India was a matrix of civilization. Gradually she developed a rich heritage of customs, traditions, beliefs, arts, architecture and religions which not only uplifted the people of the subcontinent but also enhanced the life of the faraway lands where it expanded. The expansion of Indian civilization over Southeast Asia is an important cultural phenomenon from many aspects, notably for having raised peoples ethnically and culturally to a high level of civilization. The consequences of this phenomenon are deep and vast.

The Indian influence gave rise to entirely new artistic currents, schools, stylistic trends and experiences. Thus were originated great works of arts capable of standing comparison with the best creations of the Indian genius, and because of different social and historical evolution, the Indian acculturation of Southeast Asia was not limited to a mere parallel development of forms and styles. Once rooted, it activated innovatory currents, which, without denying their origin, ran their own courses with styles and attitudes of taste quite unlike those of the large peninsula. Trade acted as an important spur to the migratory movement and India's superiority in the fields of medicine and religion made the settlers welcome the local population. This random penetration and the subsequent fusion between the immigrants and the natives gave rise to the so called Indianized States of Southeast Asia.

The systematic exploitation of the immense and until then unused local riches made possible by Indian knowledge and techniques became essential to the economic equilibrium of the Eastern world. Mutual understanding was immensely facilitated and, since Indian art was preeminently religious it encouraged the diffusion. From this Indianization was born a series of kingdoms that in the beginning were true Indian States; Cambodia, Champa and the small states of Malay Peninsula; the kingdoms of Sumatra, Java and Bali; and finally the Burmese and Thai kingdom.

Music along with other forms of arts developed in India and reached the Southeast Asia region in a similar manner as described above. When the music of the region attained classical state a great impact on it was Indian. Hence, looking at the musical instruments the influence from India seems very conspicuous. This chapter aims at studying the development of musical instruments of both the regions from Southeast Asian point of view in general and Thailand in particular; which means that the evidences taken from other countries are to support those of Thailand and not to study the musical instruments of these countries; only the conclusions about Indian musical instruments in the region can be made from the following. The plan of work followed will include the description of evidences from other countries of Southeast Asia like Myanmar, Cambodia, Champa, and Indonesia; origin and development of the musical instruments and their representations in literary and archaeological sources in India; and their comparison and discrimination with those of Southeast Asia.

The distribution of *Mahoratuk* and bamboo instruments throughout Southeast Asia has already been discussed in Chapter II, hence, they will not be discussed in the following description of evidences from other countries. The concentration will be mainly on the sources depicting musical instruments from India.

A: The Description of Evidences from other countries of Southeast Asia.

1. Myanmar.

Just as today all types of Burmese plays are accompanied by the traditional Burmese orchestra, the beginnings of Burmese theater contained a music that, like the theater, was probably based on primitive religious rituals. Before Indian and Chinese musical influences, the inspirational sources of Burmese music and dance was the miracle plays (*nibhatkhin*), which, in turn, were based on singing, dancing, and entertainment in local folk feasts that date back to antiquity. The worship of spirits (*nats*) at Chinese festivals was accompanied by women who, through song and dance, communicated with and were possessed by these spirits. Following this practice, professional entertainers taking the place of women danced, sang and played instruments during the first *nibhatkhin*. These practices led to the dancing and singing associated with the *pwe*, a popular play for public and courtly entertainment. Foreign musical influences came from India, China and Thailand. Indian elements appear in

musical terms, theories about scales, and in some musical instruments - oboe (*shahnāi*), double-headed drums, cymbals and the arched harp (bow-shaped *vinā*)¹.

Before the eleventh century A.D., Buddhism was dominating in most parts of Myanmar. The archaeological remains consist a bulk of Buddhist monuments and sculptures. This Buddhist monuments mainly include pagodas in typical Burmese style which does not have much carvings and we are apparently left with few evidences of musical instruments. However, Myanmar is nearest to India and had direct Indian influence from Bengal. Hence, the widespread use of Indian musical instruments in Myanmar can not be denied, some of which survives till today.

An eighth century, carving found from Hmawza² shows Brahma, Vishnu and Shiva. They are sitting on lotus blooming from the navel of 'makarā', a mythological creature resembling fish and elephant. On the left Brahma is sitting with his front two hands in *namaskār-mudrā*. On the right Shiva is sitting in *mahārājājalāsana*. Vishnu in the middle has four arms of which the upper left hand holds the conch with the help of four fingers and his thumb is laid across the trunk of conch. Vishnu and Shiva are wearing a high crown each which is typical of the contemporary Burmese arts. (pl.33)

The Vishnu sculpture from Nat-hlaung-kyaung³ dated 10th - 11th century has Vishnu sitting on *padmāsana* which in turn is carried by *garuḍa*. Out of the four hands the left back hand is holding the conch from

its tail. The spiral and lip of the conch are clearly seen. Vishnu is seen wearing a high crown, necklaces, *dhotī* etc. (pl.34)

A terracotta plaque found from Pegu district⁴ dating around eighth century shows musicians and drunken dancers. The woman on left seems to be playing a drum. It is not clear what the person on the right is playing but the instrument seems like the gourd *vīṇā*. Two men in the middle are seen dancing. The man on the top left is blowing a horn an instrument called '*shringa*' in India. (pl.35)

A bronze sculpture dating ninth century A.D. found from Payama Pagoda⁵ depicts a musician group and dancer. According to the Chinese Tang dynasty geneology, in 802 A.D. the king of Pyu kingdom sent an embassy with a gift of 35 musicians playing various musical instruments; the bronze sculpture is assumed to be related to that journey. Man on the extreme left is playing a transversal flute. The man next to him is dancing while the third man, in the center is seen sounding cymbals. The fourth man is again dancing with one hand on hip and the other hand is held high. It is not clear what the man on the extreme right is playing but from his position it can be assumed to be a drum. (pl.36)

A bas-relief in Nagayon⁶ temple built in the reign king Chanzittha around 11th - 12th century A.D., shows four celestials adoring the Buddha. The two human figures on the left and the one on the extreme right have their hands in *namaskār-mudrā*, and they have a halo around their head. The third person from left is playing a bow-shaped *vīṇā*. The *vīṇā* has a

wider lower part in the shape of a boat which acts as a resonator. The *vīṇā* seems to have seven strings and the celestial is playing upon it with his fingers. This type of *vīṇā* in India was called *chītrā vīṇā*. All of the celestials are wearing a crown, *kuṇḍalas* and *dhotī*. (pl.37)

2. Cambodia

Culturally Cambodia, Thailand and Laos are grouped under one unit especially in regard to music. The main reason for this is the region covered by the Angkor empire which encompassed Laos and the most of Thailand. The difference with Thailand was that it was also part of the Mon kingdom of Dvaravati and though under the suzerainty of Angkor the central parts of Thailand were the kingdoms of Lavo and Sukhothai. This differentiate Thailand slightly from Cambodia because the region of Thailand was Buddhist dominated while the region of Cambodia was Hindu dominated. For centuries the Khmer kingdom was the greatest center of Hindu civilization. There were almost parallel development of Hindu culture in India and Angkor. The civilization of Angkor in turn greatly influenced the culture of other countries of Southeast Asia. In short it can be said that it was a relay station of the Indian culture in Southeast Asia, especially the mainland.

As discussed in case of Thailand, Cambodia also had similar indigenous musical instruments but the musical instruments from India had the greatest impact and it is mostly these instruments that found their way to epigraphical and sculptural representation. Except for the inscription of

Phaenthongdaeng U-Thong, all the inscriptions discussed in the preceding Chapter belong to the Khmer empire and the musical instruments mentioned are the ones that were used in the region of Thailand and Cambodia. Hence the musical instruments from the inscriptions used in Cambodia before 11th century will include the string instruments like the *vīṇā*, drums like the *mṛdaṅga*, the *duṇḍubhi*, the *paṭaha*, the *paṇava*, the *bherī* etc.; wind instruments like the flute, the *kāhala*, conch, horn and the idiophones like the cymbals, clappers and bells.

In case of sculptures, just as in Thailand, numerous Vishnu images were found. Hari-Hara from Prasat Tra-Pang-Pong⁷ dating 723 - 807 A.D., is in Prei Kmeng - Kam Pong Prah style. The sculpture has four hands and is wearing almost cylindrical crown behind which the horse shoes arch supporting the statue pass. Hari-hara's left back hand is holding the conch from its end which has a shape like tail of a fish. The spiral leaning towards his right are clearly seen. The deity is wearing a short *dhotī* with the waist band of the same cloth. (pl.38)

The Vishnu sculpture in Kulen style found from Rup-Arakh⁸ dating 827-877 A.D., has four arms out of which the front two has disappeared. The deity is wearing a cylindrical crown and a short *dhotī* with many fold decoration. His left back hand holds a conch from its tail with the help of thumb and forefinger. Most of the conch is seen above the fingers and three spiral and lip of the conch are clearly seen. (pl.39)

The Vishnu on *garuḍa* carving on the wall of Prasat Krawan⁹ dates back to 897-927 A.D. The *garuḍa* is almost human but for the wings and feathered tail. Vishnu has four arms. Both, Vishnu and *garuḍa* are wearing short decorative crowns. The left back hand of Vishnu holds a conch from its end which is like the tail of a fish but is wider than similar tail in the preceding sculpture discussed. The conch is almost horizontal and the spirals are clearly seen above. (pl.40)

The facade of the eastern gopura from Phnom Chisor¹⁰ dating ninth century, has a carving of Shiva dancing as '*Vīṇādhara*'. Shiva is dancing in *lalita* pose. He carried a *vina* across his chest, which he plays with both his hands; one of his hands is laid on the gourd while the other is holding the stick of the *vīṇā*. *Kāraikālammaiṃyār*, as an emaciated old woman, is seated to his right, sounding the cymbals. As the name itself signifies, *Kāraikālammaiṃyār* is called after the place of her origin, Karaikal in South India. Though she is very well known in Saivite lore in South India far beyond her birth place Karaikal. It is amazing to find her representations in a place so far off as Cambodia and repeated so often in exactly the same way as she is known in the homeland. To Shiva's left is a drummer and Brahma also, four faced, keeps time (*tāla*). (pl.41)

On the other façade, that of the southern *maṇḍapa* from Prasat Baset¹¹ there is a carving of Shiva *Vīṇādhara*. The Shiva has ten arms and is dancing in *chatura* pose. The *vīṇā* is held in the similar manner as described above. There are numerous decorative carvings among which

Kāraikālammai to the right, *Gaṇas* and Vishnu to the left keep time. The carving is dated around 1017-1087 A.D. (pl.42)

A bas-relief on the wall of Prasat Bayon¹² dating 11th - 12th century A.D. shows a procession; number of man are walking some of which hold or play musical instruments. Man second in the line holds an hour-glass shaped drum which is tied with a strap supported on his shoulder. The man holds drum around its waist and is playing upon it with his right hand. The drum is held on the left hand side of the man and is beaten only on one side. This type of drum in India was called *huḍukka* or *paṇava*. Two men in the middle are carrying a large size drum tied on a pole. A short man in front of the drum is holding curved clubs. He appears to be dancing and beating the drum with the clubs. The large size drum is the war drum *bherī*. The man behind the drum is blowing a horn, the instrument is similar to the Indian *shṛīṅga* (pl.43).

In later carvings of Angkor Wat dating early 12th century similar large size drums carried on a pole by two persons and beaten by one with long clubs are frequently depicted. Such carvings like the one depicting the battle scene of *Mahābhārata* and the other depicting the Titan of *Kālanemi* also has musicians playing the *paṭaha* like drums, conch blower, trumpet (like the *raṇashīṅgā* of India) blowers and gong beater.¹³ (fig. 2 and 3)

3. Champa

Although Vietnamese music belongs to the great Chinese musical tradition, which includes the music of Korea, Mangolia, and Japan, some of its musical elements are indigenous or come from other parts of Southeast Asia, and some derive from Champa. Before the eleventh century, Champa was the dominant kingdom in the region. The completely Hinduised kingdom had Indian culture administration, customs and beliefs which are described at length by Ma-Tuan-Lin¹⁴ in his fourth century description of the life in Lin-yi. The musical instruments he observed were (the harp type *vīṇā*), (the *vīṇā* with five strings), the flute ... conches and drums etc., The instruments like the *vīṇā*, flute, cymbals, Bharata era *mṛdaṅga* etc., observed by R.C.Majumdar in his study of Champa has already been indicated in the preceding Chapter.

The Vishnu carving from Phong-le dating ninth-tenth century has four arms and the deity is sitting in *Mahārājājalāsana*. Vishnu is wearing *kiritamukuta* and a short *dhotī*. The front left hand holds *gadā* while back left hand is holding a conch with fingers around trunk of the conch. The three layers of the spiral are seen above (pl.44).

A carving of Shiva dancing on Nandi¹⁵ dating around eighth century has Shiva holding a gourd *vīṇā* in his front two hand. Shiva is shown with 24 arms dancing on a huge bull and a woman standing to the left in front of the animal. As usual in the case of Chalukyan bulls *Nandi* has a large

necklet of bells. Gourd of the *vīṇā* held by Shiva is slightly above his chest. The left hand near gourd is plucking, while the right hand is laid across the stick of the *vīṇā*. In two of his uplifted hands, he holds aloft a snake and two other arms are used for clapping above his head; the rest carry indistinct attributes. (pl.45)

The bas-relief on an architectural base shows a musician playing the *vīṇā* dates back to 10th century¹⁶. The carving is in Tra-kieu style. The man is seen wearing a decorative short crown, large earrings, necklace, bracelet, armlet and a short *dhotī*. The guord is laid across his right chest, the right hand near the gourd seems to hold the *vīṇā* with four fingers on the upper side while the thumb is under the stick, the left hand is laid toward the lower end of the stick with four fingers on the stick and thumb laid on side (pl.46).

A vigorous figure of dancing Shiva dating back to the 10th century is in My-son A₁ style¹⁷. The Shiva has 16 arms, no attributes appear in the hand, all of which, except two are in *pātakā-mudrā*. Among the *gaṇas* playing music include on his right, one playing a bow-shaped *vīṇā*. The lower part of the *vīṇā* is thick as observed in case of similar *vīṇā* from Myanmar, again the *vīṇā* seems to have seven strings hence it is the *chitrā vīṇā*. One *gaṇa* on Shiva's left is playing on drums which seem to be three pieces of Bharata era *mṛdaṅga*. However all the three pieces look vertical whereas in case of Bharata era *mṛdaṅga* one of the drum is horizontal. There are other divine witnesses of the dance of Shiva. This sculpture is

now preserved in the 'Musee de Tourane', now called 'Cham Musuem', Da Nang. (pl.47)

Yet another carving of Shiva from Champa kept in the same museum dates back around 10th century¹⁸. The ten arms Shiva is dancing in the *chatura* pose on a pedestal, with the *nandi* bull seated against it. Unfortunately, the upper part of the figure is mutilated and lost. There are fluttering *devas* above, shown in adoration of the dancing deity. To his left, there are traces of a deity which may have been Vishnu four-armed, playing the drum, the corresponding figure to the right is almost completely lost. To the right of Shiva there is *Bhṛingirīti*, skeleton like, dancing in ecstasy. Next to him is seated Vaisravana, playing the Bharata era *mṛdaṅga*. Identifying from the braces of the drums, two of them in front have vertical braces while the one behind them has horizontal; also one of the musician's hand is beating the drum placed vertically while the other is clearly seen beating the horizontal drum which undoubtedly shows that there are three pieces of the drums. Still farther, Indra is seated under a tree playing the flute. This and the other tree to the left of Shiva, indicate that Shiva is dancing in a grove in the open. Baby skanda is standing admiring the dance of his father, following the example of his mother Parvati, seated on a *bhadrāpīṭha*. This image very closely resembles Shiva dancing in *chatura* pose from Badami. (pl.48)

On the carving of pedestal of My-son E₁¹⁹ appear two musicians. One of them wearing a short crown and a short *dhotī*, is playing a

transversal flute. Both his hands hold the flute near middle and the end; the fingers touch the upper portion of the flute presumably on the holes. The other musician is playing upon a lyre or a *chitrā vīṇā*. He is wearing a high crown and short *dhoti*. Both the carvings are surrounded by numerous decoration including pillars on both the sides.(pl.49)

Besides the two types of *vīṇā* observed above the guitar type *vīṇā* was also seen with some sculptures. Swami Prajnanananda²⁰ in his study about The Historical development of Indian music found this type of *vīṇā* distributed as figures as Quizil, Turfan, Borobudur and Champa. (fig.6)

4. Indonesia

Java in Indonesia was an important Buddhist center. The carvings and sculptures of Borobudur, Prambanan and Lara-Djonggrang give considerable insight into life and culture of the people of the Indonesia before 11th century. As the Indian influence spread in most of Southeast Asia equally, important inferences about other countries regarding the Indian acculturation can be made, as the carvings in large numbers from the above mentioned places show almost every aspect of the life of people. The region of Sumatra has not revealed much of artifacts owing to the Srivijayan empire's preoccupation with trade and commerce, which has already been indicated in the Introduction.

The Vishnu image from Tjibuaja²¹ dating about sixth-seventh century is in Pallava style. It seems to be one of the earliest images of a

Hindu god in Java. The deity has four arms which hold different attributes like *gadā*, *chakra* and a conch. The left back arm holds the conch from its tail. The three whorls and lip of the exquisitely carved conch are clearly seen above. The way in which he holds the objects, the general style of the image and the conical headdress are similar to those of statues from the south Indian Pallava kingdom, about the same time.(pl.50)

A splendid sculpture of Vishnu from Belahan²² in the form of portrait-statue of Airlanga dates back around 11th century. Vishnu is sitting on *garuda*, shown fighting his natural enemies the snakes, holding two of them in his claws. The god has front two hand in *dhyāna-mudrā* and his back hands hold a flaming *chakra* on his extended forefinger, and a winged conch. Tail of the conch is between his thumb and forefinger, lip and spirals of the conch are seen above. Wings of the conch are very decorative. There are also numerous jewels and a highly decorative crown.(pl.51)

A bas-relief on the wall of Borobudur²³ depicts a prince and his consort enjoying dance and music. The couple is sitting on a throne on the right, the dancer is in the center and the musicians are on the left side of the relief. The musicians are in two rows, the front one has all of them sitting, while the women musicians at the back are standing. First from the left of the sitting musicians is playing large size cymbals, the central portion of the cymbal seen on the front is slightly bulging and has a handle. Edge of the other cymbals, is seen below the one in front. This type of large size cymbals were called *brahmatāla* or *jhālara* in India. The third musician is

playing upon a pot drum. The pot seems to have a parchment on its rim and the player is beating the drum on its top. The drum was a popular musical instrument in India since the time of Bharata and was called *dardura*. After a few centuries the *dardura* came to be known as a *ghata*. (The same drum is being played by a woman on yet another carving depicting the Round of *Samasāra*). The rest of the sitting musicians are two flute-players playing transversal flutes. All standing women at the back are sounding small cymbals. (pl.52)

In the second gallery, a bas-relief depicting 'Sudhana Beholds Maitraya'²⁴ shows the number of musicians playing different instruments. Sudhana is in the center surrounded by three rows of admirers, either playing musical instruments or adoring Sudhana. In the top-most row the first musician from the left is sounding cymbals held horizontally, second musician at the back, whose face is visible, seem to be playing a flute, the third musician is beating a *paṭaha* drum, the musician next to the drum player is playing a guitar type *vīṇā* with a very narrow pear shaped resonator, the *vīṇā* has three pegs at the other end which shows that it had three strings; the musician is plucking the *vīṇā* with a rectangular plectrum. On the right, of the six persons one is sounding cymbals while the last musician in the line is playing the Bharata era *mṛdaṅga* similar to the one observed in the case of Champa. On the second row two musicians on the right of Sudhana are playing the *vīṇās*; the *vīṇā* player on the left is playing a gourd *vīṇā*. The gourd is held at the lower hand and the other end of the *vīṇā* rests on the musicians shoulder. The *vīṇā* player on the right is playing upon a guitar type *vīṇā*; the resonator here is however much broad

than the guitar type *vīṇā* mentioned earlier. Most of the other persons sitting have their hands in *namaskār-mudrā*(pl.53).

An interesting bas-relief on the base, which is one in the hundred and sixty reliefs that illustrates a Buddhist text, *Karmavibhāṅga*²⁵ explaining the operation of the law of Karma. According to the text the relief considered here depicts people who enjoy 'worthless entertainments'. They will be reborn in some inferior status. From left to the right; musicians, playing *kledi*, a kind of mouthorgan, recorded in Indonesia from the Bronze Age till the present (especially in Borneo), various musical instruments on the ground, a dancer, a singer (?), a man marking the rhythm and a merchant. There are three men near the tree in the center, to the right, the one sitting on the front is playing a crude type of musical instrument. The instrument is long rectangular bar which is ridged with horizontal strips, a plectrum is held across the instrument which is moved up and down the ridges to produce rhythmic effects. All of the above mentioned men are either tribal or belong to a very low caste while the couple sitting on the right, from their dress seems to belong to a higher caste. However, they are the sinners mentioned by the text who enjoy 'worthless entertainment'. The carving manifest the attitude of the people towards the musical instruments that were indigenous. All the musical instruments including the ones on the ground which are unrecognizable, are the local musical instruments 'used only by the uncivilized or the people of the lower caste'. It is because of this that the music is called as 'worthless entertainment'. The depiction of 'folk' musical instruments of the time in the above mentioned manner manifest the attitude of the people towards

these instruments, which has remained almost the same even today. The issue will be dealt in detail in the analysis.(pl.54)

The sculpture of dancers from the balustrade Shiva temple from Chandi Lara-Djonggrang²⁶ dates back to the tenth century. Three persons are seen dancing; the man in the front is beating a large *paṭaha* - like drum while dancing. In the other carving from the same temple illustrating an episode from the *Rāmāyaṇa* depicts number of *Asuras* trying to rouse Kumbhakarna from his sleep. One of the *Asuras* above Kumbhakarna's face is blowing a large conch, his fingers are on the tip of the conch while the thumb is laid across its trunk. (pl.55-56)

A bronze statue of Tara found from Ngandjuk (Kediri)²⁷, dates back to eighth - ninth century and it is presently kept at the Djakarta museum. Tara is wearing a highly decorative crown and jewels, and is sitting on a *padmāsana*. She is playing a bow shaped *vina* which from the pegs it has, can be identified to have seven strings. The lower portion of the *vīṇā* is larger than the upper and it acts as a resonator. The *vīṇā* is called *chitrā-vīṇā* as discussed earlier.(pl.57)

Chakra-chakra from one of the temple in the neighbourhood of Singasari²⁸ is a sculpture of Shiva *Bhairava* in a terrific shape. The statue is presently kept in Leyden Museum. The god is seated on a dog or jackal. He is completely naked except for a few ornaments in which skulls and cut-off human heads are a prominent element. The attributes in his hands are a big knife, a trident, a skull bowl and the *ḍamarū*. His left back hand holds

the *damarū* which is exquisitely carved in great detail so that even the string holding small ball can be seen clearly. (pl.58) The sculpture is dated around the early thirteenth century.

B: The Musical Instruments from Literary and Archaeological Sources of India and their Comparison with Southeast Asia.

The earliest evidences of civilization in India is found in the chalcolithic culture of the Indus Valley, whose approximate date has been fixed a date prior to 1500 B.C.²⁹ This ancient civilization extended as far North as Rupar on the river Sutlej at the foot of the Simla hills, as far west as Baluchistan and Makran and southward to the Lothal in Kathiawar. The most notable sites so far uncovered are Mohanjodaro, 260 miles upstream from Karachi and the west bank of lower Indus, and the Harappa about 150 miles south west of Lahore. Terrocotta seals, vessels, image of animals, status, remnants of cities and fort go to prove that this was the most ancient civilization of India. Some regard the civilization as a pre-Vedic, and some as Vedic. Among other finds related to this study are a flute, a harp with strings, and percussion instruments. A bronze figurine of a dancing girl, shown standing on one leg with the other crooked in front of her, this stance could be a forerunner of the classic pose of the dancing Shiva³⁰. All these findings show that the culture had fairly well developed forms of arts like music and dance. However, on this basis of the scanty data available we cannot say what the music of those time was like.

India has more detailed accounts of the music of the Vedic times. According to them the art of music was once known only in paradise. Indra

had musicians in *svarga* who excelled in the various forms of this art. The *apsarās* were devoted to the dance, the *kinnaras* were instrumentalists, and the *gandharvas* the celestial singers. The elements of the musical theory are the first found in the Vedas, especially the *Sāma*-veda whose chants were sung in a special manner. The ritual steps of the early priests as they performed the Vedic sacrifices are said to have been the origin of the classical dance, and the finger devices called *sāma-hasta* used by the Vedic reciters to remember the measure were the beginning of the *mudrās* or hand gestures.

There are numerous reference to music and musical instruments in the *Rāmāyaṇa*, the *Mahābhārata*, the *Jātakas*, the *Purāṇas*, *Jain Sūtras* and ancient Tamil and Telugu literature.

The earliest theories of Hindu music were formulated subsequent to the Greek period, and some scholars see their origins in the works of Greek writers on the subject. A very ancient tradition speaks of Dionysus as having come to India with his companions and having taught the Indians to worship the gods and himself by playing cymbals and drums. In the Indian *rāgas* were supposed to arouse in the listener feelings of aggressiveness, tranquillity, sensuousness and so forth.

The first authorities on Hindu music were Dattila and Kohala whose writings are lost, but who are quoted by the great master Bharata (c.200-100 B.C.) who devotes the last six of the thirty-six chapters of his *Nāṭyaśāstra* to the subject of the music.³¹ Bharata established the *mārga* or

method, setting the basis for the classical musical pattern. He nowhere defines the *rāga*, and classifies melodies under the name of *jāti*. His doctrines were extensively elaborated by his imitators and commentators. By the eighth century a number of musical work were ascribed to the mythological *ṛishi Nārada* of which the best known were the *Nāradiyaśikshā* (eighth century), the *Samgīta-Makaranda* (ninth century), there are others of still later date.

Numerous musical instruments were developed and consummated before the eleventh century. Traditionally they were divided under following categories, namely; (1) *Tata* that which includes all string instruments like the harp shaped *vina*, the guitar type *vina*, the gourd *vina* etc., (2) *Avanaddha* which comprises all that are struck like the drums, including the *damaru* (3) *Sushira* which includes all wind instruments like the flute and the conch, and (4) *Ghana* which encompasses all the cymbals like resonators. When musical instruments of different types were played together during dance or chorus songs it was called *Vṛnda-Vādyā* or Orchestra and in India it was clearly well developed even before the dawn of the Christian Era.

The following describes different musical instruments important to this study; their mythological and historical origin, uses, their development through the ages, and their influence and descent to Southeast Asian region.

1. Conch

Before 11th century A.D., conch was the only musical instrument that appeared naturally. Although the most usual belief is that the conch or *śankha* emerged from the ocean, its origin is also attributed to *Vṛta* in whom all things were initially contained; or it was derived from *Soma*; or from the lightning; or from the bones of the gods. In the earliest times used as ornaments or amulets, and later as libation vessels, at the sacrifice. When the point of the conch - shell was cut-off, the main body of the shell was used as a horn or trumpet in war. As its sound was supposed to awaken the *divinity* in the temple and drive away demons from the offering gradually it became part of musical instruments played during religious rituals and ceremonies. Conch is associated with Brahmanism or Hinduism, especially Vaishnavism as Vishnu is seen carrying a conch called the *pāñchajanya*.

Rig-Veda was composed sometime between 1500 B.C. and 900 B.C. and has a fixed text from about 300 B.C. Some scholars on the basis of astronomical evidences mentioned in *Rig-Veda* place it at as far back as 5000 B.C.³³ Among the wind instruments mentioned in *Rig-Veda* conch has a prominent place. In *Yajurveda*, we find a reference to regular professional players of instruments, who had specialized in playing particular instruments, conch blower was one of them. Conch is also mentioned in *Sāmavidhāna Brāhmaṇa* of *Sāma-Veda*. This traces the origin of conch as a musical instrument way back before the Vedic period.

The *Rāmāyaṇa* of *Vālmīki*³⁴ which was written before 350 B.C. gives a description of the life and exploits of Rama, the son of king Dasaratha of Ayodhya; a kingdom in the north of India. From the epic, it can be said that music was fairly well developed during this age. It played an important role in the life of the people both in Ayodhya, the capital of Rama's kingdom; Kiskindha, the residence of Sugriva and Lanka, the capital of Ravana's kingdom. It mentions a kind of wind instrument, the conch which was frequently blown on auspicious occasions and at the time of war.

The other important epic is the *Mahābhārata*³⁵. It originally consisted of 24,000 verses. Additions were made time after time until it swelled to one lakh verses. It does not have much reference to music as in the *Rāmāyaṇa*. That may partly be due to the fact that it was an age of conflict and war and music flourishes mostly during peace. However, they mentioned the names of a few musical instruments, one of them is the conch.

Other important work that refers to music is the *Jātaka* tales compiled by an unknown author around 450 B.C.³⁶ It is said in one of the *Jātaka* that Buddha in a previous life was an excellent musician. It is necessary to mention that Buddha was not against music as such, but only against sensual music, against society in which people exulted in drunken revelry. The *Jātaka* tales which described the past lives of Buddha contain many references to music. The *Mahājanaka Jātaka* recorded that the *Bodhisattava* himself was a master player of the conch.

Besides these we also find numerous references to the conch in the *Purāṇas* and the Jain text of *Nandi-Sūtra*. Vaishnavism is a sect devoted to the worship of Vishnu and his two chief incarnations, Rama and Krishna, with their consorts. Its chief tenet is that of *bhakti* or devotion to the personal God of Grace, which some scholars trace back to *Varuṇa* in the Vedas and to certain passages in the *Upanishads*. Fragments of such a cult are scrappily discernible in the first and second centuries B.C. in the creeds of certain non-Aryan tribes like the *Sātava*. These early faiths seem to have become blended in the doctrines of the *Pañcharātra* sect, which embodied many of the ancient primitive features later associated with Vaishnavism. Vishnu is regarded as a god of paramount importance and the second god of the Hindu triad, being regarded as the Preserver. To the Vaishnavites he is the greatest of all gods. Vishnu is generally represented with a dark complexion, his four hands hold a *padma* (lotus) a *gadā* (mace), a *śankha* (conch), and a *chakra* (discus). Thus conch is almost invariably seen with all Vishnu sculptures, paintings etc.

One of the earliest Vishnu sculptures holding the conch dates far back as first century A.D. The sculpture is presently at Patna, Bihar³⁷. The deity is seen wearing *dhotī*, wide short crown and long *kundalas*. The Vishnu has four arms. The fore left hand is holding conch from lip, the thumb is laid towards the tip of the conch and the spiral can be seen. The body of the conch is held close to the hip. This is a very simple sculpture with little decoration.(pl.59)

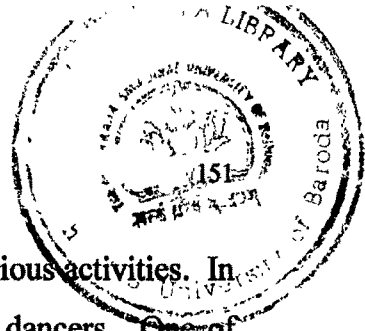
About the second century A.D. Vishnu sculpture as bas-relief called *Anantaśāyana* or *Śeśāsayana* is found at Jahangir Rock, Bhagalpur Sultangunj.³⁸ The deity is shown sleeping on *Nāga* with its hood spread over his head. A lotus flower blooming from his navel has Brahma sitting on it. The Vishnu holds the conch from its lip and its spiral and tip are clearly seen.

The standing Vishnu at Allahabad, presently kept in the Municipal Musuem, has four arms, wearing a short crown with halo behind, *kuṇḍalas*, necklace and *dhotī*. The conch is held in the same manner as the Vishnu at Patna described above.

Vishnu riding on *garuḍa* at Rajgir³⁹ has four arms. The *garuḍa* is nearly human but for the beak and wings. Vishnu holds the conch with left back hand which is laid on his lap. The Conch's trunk is in the palm and the spiral is facing down.(pl.60)

Sandstone sculpture of the standing Vishnu at Mathura, Uttarpradesh⁴⁰ has four arms and is wearing high crown. There is a halo at the back of his head. He holds the conch with his left hand close to his body. The three mid fingers holds the conch from its lip, the little finger supports the end while the thumb is laid along its whorls. (pl.61)

An interesting variation of conch is seen on the relief depicting *Māndhātā Jātaka* at Amaravati⁴¹. A languid and evocative scene of courtly life is seen here. A little above the center is seen princes sitting on a white



throne. They are surrounded entirely by women doing various activities. In the left fore ground is a group of female musicians and dancers. One of them holds the conch-shell trumpet with an elongated, tubular mouthpiece. One hand is held on the pipe near the mouth while the other is kept where the pipe join the conch. The Conch without pipe also occurs on other carvings of Amaravati while the conches with pipe are also found on sculptures of Bharhut. (pl.63)

At Nagarjunakonda, the conch is represented thrice in the reliefs. The panel illustrating “transportation of the head-dress to heaven,” “nativity of the Buddha”⁴² and a sculpture fragment, reveal a conch blower. In the instance a celestial is shown blowing a conch to the accompaniment of other musical instruments in a procession. In the other case also a celestial is shown blowing a conch but singly. In both the case the conch is held by the celestials in both the hands and is being blown while keeping it directly to the mouth. (fig.10)

The sculptural depiction of conches at Nagarjunakonda is also attested to by the recent excavations at the site. The recent excavations⁴³ have also yielded conches of which the two recovered from the vicinity of Astabhujaswami temple bear inscriptions reading “*bhagavato atha bhujasāmisa*” and “*dachchinakanasara*.” Such blowing conches have also been activated from numerous other religious sites.

The fifth century A.D. Vishnu sculpture are more decorated but the body is same as the sculpture of earlier centuries. A prominent example is

Vishnu with four arms from Benisagar. The Vishnu is wearing *kirita mukuta* decorated with gems. The conch is in the left hand with the spiral turning down and tail facing up.

Vishnu on a terra-cotta plate of size 12-1/4 inches from Bhitagaon⁴⁴ is sitting on the back of flying *garuḍa*. Both the front right hands have disappeared. The back left hand holds a bow and the front hand holds a conch near his mouth. The four fingers hold the conch from lip while the thumb is laid across the coils. It is one of the earliest Vishnu figure blowing the conch. The *garuḍa* looks human but has wings on the left one of which sits a human figurine. (pl.64)

Nṛsimhavatāra carving an incarnation of Vishnu at Kherli hill, Bhagalpur⁴⁵ has the feet and the head of a lion. It has long curls, decorative headband like a fetter and is wearing a beaded necklace. There is no other piece of jewellery except the two mentioned above. The deity holds a conch close to his body with the help of the thumb and forefinger.

In Ajanta caves the depiction's of conches are profuse. Number of paintings show person blowing the conch in various manner. One such painting in Cave I shows a group of musicians and a dancer. One of the musicians in center is blowing the conch holding it with both his hands. The other two musicians, are seen playing drum and cymbals. (pl.62)

Sixth century A.D. high relief of Vishnu riding on *garuḍa* Bihar⁴⁶ has four arms wearing a high crown decorated with minute carvings, long

kunḍalas, necklace and bracklace. The conch is in the left hand which is laid along *garuḍa*'s shoulder. The conch looks like a flame of fire on his palm. The wings are spread in a circular form with the ends meeting at the head of Vishnu giving an impression of halo.

The sand stone standing Vishnu at Devakosta, Malegitti Shivalaya Mahamandapa⁴⁷ has two arms. The Vishnu holds *gadā* in the left hand while the right hand holds the conch close to his body. On the northern wall is Vishnu with four arms wearing *kirita mukuṭa*, necklace, bracklace and *yajñopavīta*. The left hand holds the conch in a manner different from the Vishnu sculpture of the same age. The hand is raised with the elbow bent and the conch is held away from, but at the same height as the head. The thumb and forefinger holds the end while the rest of the conch body is above with spiral at the upper end.

The other interesting Vishnu carving is on a lintel of Huchchappayya gudi, Aihole⁴⁸, dating about 6th - 7th century A.D. Vishnu depicted here is in *Śeṣāsāyin* or *Śeṣāsayana* position. The deity is sleeping on the coils of *Ananta* and has four arms. The front right hand supports the head, the back right hand is laid along the body, the front left hand is laid along the body on thigh and the back left hand is held along the shoulder. The Vishnu is lying with his legs crossed. He is seen wearing *kirita mukuṭa*, necklace, bracklace etc. The emblems of Vishnu the conch, *chakra*, *gadā* and lotus flower are all around him. The tip, whorls, lip, trunk and the tail of the conch are clearly seen. (pl.65)

In the seventh century A.D., in addition to Vishnu the conch also appears with Vaishnavi and Durga sculptures the consorts of Vishnu and Shiva respectively. The position of holding the conch here changes from keeping it close to the body, to raising it in the line of the head. Durga with four arms standing on the buffalo-demon *Mahisha* at Alampur is clearly seen holding the conch in one of her four hands. Durga with eight arms at Trimurti Temple, Mamullapuram holds the conch with one of her left hands. Conch when appears in the hands of Durga does not mean an auspicious object but a sign of victory. The Vaishnavi figure at Bhol-Brahma Temple, Alampur⁴⁹ has four arms. The goddess is holding conch in her left hand with the help of thumb and forefinger.

Vishnu *Trivikrama* at Badami⁵⁰ has eight arms and is wearing a high decorated crown. The upper left hand holds a conch with the thumb and forefinger. The remaining body of the conch is seen above with lip and coils at the top. Similar shape and the position of holding the conch is found at Phra Narayana Throne, Surat Thani, southern Thailand, dating around early seventh century A.D. (pl. 22)

The other fascinating figure is the carving of *Mahiṣāsurmardini* on the wall of Badami Cave I, dating about 720 A.D. The carving depicts Durga fighting with the buffalo-demon. She has four arms and is wearing a high crown. The front right hand holds *trishūla* stabbing the demon's head. The front left hand pulls the demon by its tail, the back right hand holds the *chakra* while the left hand holds the conch. The conch is raised to the level of her head. Her thumb and forefinger hold the conch from the end and the

rest of the body of the conch is seen above. It can be distinctly observed that in the seventh century A.D. the sculpture of deities are seen holding conch with their left hands raised to the level of their face. (pl.66)

In the eighth century A.D. the conch appears in the same way as the preceding century but its shape has changed here. It is decorated with wings and the cone of spiral is sharper. Though more towards the farther end the conch is still seen gripped by the finger of the deities. A prominent example is of Durga with eight arms on bas-relief at Panamalai⁵¹. The goddess is seen standing on lion. The left hand raised the conch up with the help of fore and middle fingers and the conch leans towards her head. As mentioned above the conch has wings and the spiral is sharper.

Bas-reliefs of Vishnu *Trivikrama* with four arms found at Lakshmi-Narasimha Cave ⁵² has a conch floating over his left hand which is held up in a position of clasping the conch. The conch has wings and the spiral is sharp that look more like a crown.

The four arms Vishnu *Vaikuntha Nārāyaṇa* sitting on *Anantā* with five hoods at Lakshmi-Narasimha Cave⁵³ has a conch in similar position as above. The conch has wings and crown on the top which is more prominent. The left hand is raised up to the end of the conch in *chaturamudrā*.

A distinguished carving is a bas-relief showing Vishnu with eight arms on the wall of Virupaksa temple⁵⁴. The conch is raised in the left

hand with the finger grabbing most of the tail. The conch is not decorated. A similar non-decorated conch show up in the hand of Hari-Hara with four arms at Hari-Hara cave II. The front left hand holds the conch horizontally with the whorls close to the lip.(pl.67)

Apart from the ones mentioned above Buddhist carvings also depicts conch. For example ivory carving of Buddha meditating from Kashmir⁵⁵ which is 14.3 cm. long and 8.9 cm. wide. There are a host of demons trying to disturb Buddha out of meditation. One of them is blowing the conch near Buddha's right ear holding the conch with both his hands. (pl.68)

From 8th - 9th century A.D., is found bronze icons of Vishnu image and his consort made in the contemporary Pallava style. The Vishnu idol has four arms, holds conch with left hand, using thumb and forefinger to grip the conch a bit above its tail. The conch has wings and a crown on the top. The lip of the conch is generally curved to look like the letter "Om"⁵⁶. The hand with conch is held up in the level of the head. Nevertheless, there are figures different from those mentioned above. The conches in such sculptures are hold near hips and are not decorated with wings or crown. Such sculpture are Vishnu with four arms on the wall of the cave at Baraba Hills⁵⁷, a high relief Vishnu with four arms at Bodha-Gaya, Bihar⁵⁸ and a high relief Vishnu riding *garuda* at Agradigum, Bengal.⁵⁹

A distinct instance of Vishnu of the ninth century A.D. is the one which two arms at Kashmir⁶⁰. There are heads of lion and wild-boar along

side Vishnu's meaning *Nṛsimhāvatāra* and *Vṛahāvatāra*. The torso is wide and thick and he is wearing a high crown necklace, bracklace, armlet and long *kunḍalas*. The right hand holds a lotus flower while the left hand holds a conch in palm with fingers loosely supporting it. The lip and the spiral of the non-decorated conch are clearly seen. The style of holding conch is different from all other contemporary sculptures.(pl.69)

There are further changes in the design of the conch in 10th - 11th century A.D. The wings are more decorative, the crown on the top looks more distinct and the tail is larger.⁶¹ The conch still appears in the left which is raised up. The tail of the conch is usually clutched by the middle and the forefinger. Standing Vishnu on *padmāsana*⁶² dating around mid 10th or early 11th century A.D. has four arms. The fore right hand is in *abhaya-mudrā*, the front left hand is laid on hip while the back hand holds the conch with the help of the fore and middle finger. The larger tail, curved hip and distinct crown on top can be clearly observed. (pl.70)

Though the above described way of holding conch is predominant the sculptures showing deities holding conch in palm still persist. Rock carving Vaisnavi at Benaras⁶³ has four arms and is seen wearing a high crown, long earrings, bracklace, bangle etc. Whorls of the conch are in the palm of the left hand which is near hip. The tail of the conch can be seen leaning away from her body. From the preceding illustrations it can be observed that all the consecutive centuries shows some development and change in the form, style, design, composition etc. of arts and hence sculptures or paintings or other relevant craft but a distinctive style can be

remnant of the one developed in the past. Such a style persists perhaps as a result of the artists convenience or ignorance of contemporary and leading forms of art.

Analysis and Comparisons

Conches appearing in archaeological, inscriptional and literary sources of India and Thailand can be divided in two categories: 1) Conches appearing as sign, emblem or auspicious object and 2) Conches appearing as musical instrument.

Around seventh century A.D. the conches held by Vishnu figure, are in the left hand raised up to the level of the head. The conches also appear with the number of decorations like the wings and crown. Even in the sixth century A.D., the Vishnu *Śeśāsayin* carving at Huchchappayya gudi, Aihole has conch floating above Vishnu. Also, Vishnu at Devakosta, Malegitti Shivalaya Mahamandapa hold the conch from tail with the thumb and forefinger. Hence, it merely appears as an emblem of Vishnu (pl.65). After this there are a series of sculptures depicting deities holding conch from the tail : the conch with Durga at Alumpur Vaisnavi at Bhol-Brahma Temple which is similar to Vishnu from City Post Shrine, Songkhla, Thailand : (pl. 23) and Vishnu from Myanmar, (pl.34). Vishnu Trivikrama at Badami holds the conch in a manner similar to Vishnu found from San Phranarayana southern Thailand (pl.24.). *Mahiṣāsurmardini* at Badami cave I (pl.66) holds the conch similarly to Hari-Hara from Prasat Tra-Pang-Pong and Vishnu on *garuḍa* from Prasat Krawan. Cambodia (pl.38-40).

Conches with wings and crown appear with eighth century A.D. Durga with eight arms on bas-relief at Panamalai, Vishnu - Vaikuntha-Narayana at Lakshmi-Narasimha cave and other Vishnu figures of Pallava style. The crown becomes more distinct and the wings more decorative in 10th - 11th century A.D. The tail of the conch is also longer. The sculptures showing such conches are Vishnu on *padmāsana* (pl.70) and Vishnu at San Chao Muang Phra Narayana, Surat Thani, southern Thailand. (pl. 24) Vishnu from Belahan, Java also holds the conch with large decorative wings which is similar to 10th - 12th century carvings of conch in India.

It is obvious that all conches appearing in such a manner are an emblem and not a musical instruments. As the conch was considered auspicious it was also used to pour libations which can be assumed from the inscription of Hinkhon II where conch appears among the names of objects donated to a temple for worship. The conch also appears with the list of jewelleries on the inscription of Prasat Hin Phnom Wan II, 1055 A.D. which shows that it was also considered a precious object. An inscription of 573 Saka (661 A.D.)⁶⁴ describes conches as medium of exchange. The inscription records the purchase of a paddy field, the price of which was paid in conch-shells which happen to be an important and valuable thing from commercial point of view.

The conch is described as a musical instrument right from *Rig-Veda*, the epics and the *Jātakas* to the *Purāṇas*. Conches in the hand of Vishnu idols before the seventh century A.D. were mainly held from the lip, had no decorations, and were held near the hip. The first century A.D. Vishnu at

Patna, Bihar, (pl.59), the second century A.D. Vishnu *Śeśāsayana* at Jahangir Rock, Bhagalpur Sultangunj, Vishnu image at Allahabad, sand stone standing Vishnu sculpture at Mathura, Uttarpradesh (pl.61). holds the conch in such manner which is similar to Vishnu idol at Chaiya, Surat Thani, the fifth century A.D. (pl.79) the sixth century Vishnu sculpture at Nakorn Srithammarat, southern Thailand (pl.20-21). Even beyond the seventh century some Vishnu sculptures hold the conch in this manner like in the eighth century *Hari-Hara* with four arms at Virupaksa temple (pl.67). Holding a non-decorated conch in such a way shows that it was treated as a musical instrument even in the hand of Vishnu. Vishnu on terracotta plate from Bhitagoan fifth century (pl.64) clearly shows him blowing the conch prove this beyond doubt.

The conch blowers shown in Ajanta caves, (pl.62) on Nagarjunakonda, Sanchi and Amravati carvings (pl.63) and conch blowers from Angkor Wat carving (fig.2) also indicates the importance of conch as the musical instrument. The conch depicted in Amaravati (pl.63) and conches in Bharhut are even seen using an addition pipe. This was done perhaps to vary the tone of the sound produced more effectively. No such conch was found in Thai evidences.

The inscription of Hinkhon II clearly mentions '*Śamikhāvādyapa*' meaning the musical instrument conch. The conch is also among the list of musical instruments mentioned on the second side of the Hinkhon II inscription and in the inscription of Prah Einkosei of Jayavarman V. The terracotta conches excavated from Prachinburi have hole for blowing which

shows that it was used as a musical instrument (pl.16-17). The use of conch in funeral along with the drum were attested by the record of the Ma-Tuan-Lin and *History of the Sui*.

A conch may be blown in three ways, side-blown end-blown or blown through an attached mouth-piece. In the side-blown and end-blown cases the conch is blown into directly by keeping it against the lips while the third way is as seen on the relief at Nagarjunakonda.

In India the conch was used as a war-trumpet, blown to proclaim victory and in some music orchestra as shown in Amaravati relief (pl.63). However, the use of conch was predominantly for religious purposes. In Thailand also the conch was mainly blown during religious rituals and ceremonies. Nevertheless, conch was viewed differently by Hindus and Buddhists. As an object conch was considered auspicious by both, but the sound of the conch was believed to disturb the meditation of monk and hamper the attainment of the supreme knowledge and insight. As such, musical instruments were never part of Buddhist worships and rituals. Sounds of all musical instruments are believed to arouse worldly passions and hurdle accomplishment of *Nirvāṇa*. Music was however played during celebrations and possibility of the conch being used along with other musical instruments can not be ruled out considering the numerous representations of conch blowers in the Buddhist carvings of Sanchi, Nagarjunakonda, Amaravati, Ajanta etc.

One noticeable aspect in the representation of conches in the hands of deities is the change in its design through the ages. The sculptures belonging to the early century of Christian Era show deities holding conch that has little or no decoration and were held from the lip. After about the fifth century the conches are held from its tail or supported on two fingers. From about seventh century the conches are decorated with crown and wings. Similarly the early Vishnu sculptures from Southeast Asia predominantly hold the conches from lip and are kept near the hip. i.e. The Vishnu idol from Chaiya, Surat Thani, fifth century, from Nakorn Sri Thammarat, fifth-sixth century, from Wat Phra Phrang, sixth century etc. The later carvings show the deities holding conch from its tail or loosely supporting it on fingers like Vishnu image from Wiang Sa, Surat Thani, seventh century, Vishnu sculpture from Rup-Arakh, Cambodia, ninth century and Vishnu image from Tjibuaaja, Java, sixth century. The conches appearing still later are with numerous decorations of wings, crowns etc., for example, Vishnu idol from San Phra Narayana, Thailand, 11th century and Vishnu image from Belahan in Java, 11th century. All these development support the statement made earlier that there were almost parallel development in art, architecture and other aspects of society and culture between India and Southeast Asia. Similarly it will be seen that the musical instruments that were popular in India quickly found their way to Farther India.

2. *Vīṇā*

Among the finds of Indus Valley civilization which is considered to be at least 5000 years old, there is a harp with strings. This shows that people in that time knew the use of the harp. However, no detailed account of music of the time is available.

Various instruments were in use in the Vedic times. Among stringed instruments we find the mention of *vīṇā* in *Rig-Veda*. In the whole of *Rig-Veda*, *vīṇā* has nowhere been mentioned. We find instead a mention of *vāṇa* which was a bow-shaped harp. The words *vāṇa* and *vīṇā* express the idea of 'sound' that prevades i.e. exerts influences upon the minds of men, and it is most probable that the term *vīṇā* has been derived from *vāṇa*. *Vāṇa* appears to have been of two kinds. One kind was like the Greek Aeolin harp with about hundred strings tuned in unison and sounded by the gust of wind. *Vāṇa* of the *Rig-veda* was of this kind. There was another kind of *vāṇa* of bow-shaped harp type. This was played with a curved piece of cane like wood. *Vīṇā* has also been mention in *Atharvaveda* and *Yajurveda* which were composed later than *Rig-veda*.

In the *Rāmāyaṇa* (400B.C.) *vīṇā* has been referred to as *laya* and *tantrī*. The *vīṇā* played a prominent part in the music performances in Royal Courts and private chambers. Valmiki described the *vīṇā* in *Śundarakāṇḍa*. It was a *vīṇā* of nine strings and only great experts could play on it successfully. Also it is said that Lava and Kusa use the *ekatantrī-vīṇā* in the *Rāmāyaṇa - gāna*. In the *Mahābhārata* and the *Harivamśa*, we

find different types of *vīṇās*, used by the kings, Brahmins, Yadavas and Samagas.

The Buddhist *Jātakas* have stated different methods of *vīṇā* playing. It is interesting to know that in the *Jātakas* we find references to the practice of solo performances of the *vīṇā* independent of vocal music. It was developed to a high degree. The description of the *chitrā-vīṇā* with seven strings, is also found in the *Guptila-jātaka*. There are many references to *vīṇā* in *Milindapañha*, a dialogue between a Buddhist monk and the Greek King, Menander (about 100 B.C.)⁶⁵

In the *Nāradi-śikṣā* (first century A.D.)⁶⁶, Narada described two kinds of *vīṇā*, *dāravī* and *gātra*. Narada explained the method of construction and the process of playing of the *vīṇā* in detail in the *Śikṣā*.

Bharata described two kinds of *vīṇā* in the *Nāṭyaśāstra*, *chitrā* and *vipañchī*. The *chitrā* type of *vīṇā* had seven strings, whereas the *vipañchī*, nine. The *chitra* was played by fingers, and the *vipañchī*, by the plectrum (*koṇa*).⁶⁷ He also gives a detailed description of *vīṇā* and the technique of playing it.

The names of *vīṇās* have been mentioned in different *Purāṇas*, *Agamas*, and *Tantras*.⁶⁸ The poet Kalidasa's (A.D. 350 - 600) references to the *vīṇā* in his *kāvya*s are plenty.⁶⁹ The Tamil Sangam literature⁷⁰ which flourished between first and fifth centuries A.D. refers to various kinds of musical instruments. In the days of *Silappadikāram* (c.A.D.650),⁷¹ the *vīṇā*

and the flute had highest recognition among the musical instruments. Further accounts on construction and playing of different types of *vinas* are available the Sanskrit treatises like *Saṅgīta-samayaśāra* (ninth-eleventh century), *Saṅgīta-Ratnākara* (thirteenth century) etc.⁷²

In the early Indian art the harp is represented very frequently. Different types of *vīṇā* of different sizes are found in the mural paintings and sculptures existing in various old cave temples and ancient Buddhist topes and *stūpas* in different part of India. The *vīṇās* represented on the Bharhut *stūpa* were chiselled during early first century B.C.⁷³ Number of women are shown dancing and playing music side by side. On the left side are seen three women playing harp shaped *vīṇā* (pl.71). Similar harp shaped *vīṇās* are also seen on the great *stūpa* of Sanchi (first century).⁷⁴

The harp shaped *vīṇā* next appears on the second century Amaravati carving⁷⁵ On the *Māndhātā* roundel (pl.63) at least three women are clearly seen playing the *vīṇās* with long, horizontal Plectrum. On the wall carvings of Nagarjunakonda⁷⁶ there are four female musicians one of which is playing a five string *vīṇā*. The *vīṇā* is of guitar shape. The woman is shown holding the *vīṇā* on her lap and is playing upon it with a plectrum. The guitar-shaped *vīṇā* has two pegs by means of which tuning is adjusted (pl.72). A similar guitar shape *vīṇā* but with five strings is observed in the hands of a man on the Amaravati bas-relief depicting descent of Bodhisattava in the form of white elephant (pl.73).

The early sculptures of Bhahut, Sanchi, Pitalkhora, Amaravati, Goli and Mathura frequently depict the harp. It also appears in Gandhara sculptures but in a slightly different form. It continues to appear in the fourth-fifth century A.D., and occurs on the *vīṇā* - *vādana* coin types of Samudragupta. A terracotta figurine of the Gupta period discovered at Rupar illustrates a *vīṇā* of the harp type⁷⁷. It becomes less frequent in the later period. And is replaced by the guitar type of *vīṇā* which becomes very popular after the sixth century A.D.

Another type of *vīṇā* which frequently occurs after the fourth century A.D. is the gourd *vīṇā*. The two types of gourd *vīṇās* are, one gourd *vīṇā* and two gourd *vīṇā* which is known as *sarasvatī-vīṇā*. Stone carvings of musicians at Nancha Kuthara⁷⁸ which is divided into two parts has two musicians on each side. (pl.74) On the left hand side is one man playing the gourd *vīṇā* and a woman playing cymbals. The gourd is held up with left hand to the chest. The middle and index fingers of both the hand are on string on each side of the *vīṇā*. On the right side a similar pair is there but the man is playing a guitar type *vīṇā* of five strings. The *vīṇā* is placed on right lap while he uses right hand to pluck the string. The left hand on the other side of the *vīṇā* play the cord. The five pegs for tuning are clearly seen on the left of the *vīṇā*.

The *vīṇā* depicted on the *Bodhisattava Avalokiteśvara - Padmapāñi* painting at Ajanta cave I⁷⁹ is again of guitar type. The *vīṇās* appearing in Shiva's hand are generally one gourd *vīṇā*. Shiva sitting on Nandi at Alampur⁸⁰ dating around mid seventh-eighth century A.D. is seen holding a

gourd *vīṇā* with his two front hands. The gourd is on his chest while the other end of the *vīṇā* is on his right knee. His right hand's finger plucks and the left hand is playing cord.(pl.75.) The same *vīṇā* is in the hands of *Ardhanārishvara* at Badami cave II⁸¹, late sixth century A.D. and is being played in similar manner. The *vīṇās* on the "Descent of Ganga" 'Arjuna's Penance' etc.Carvings, seventh century A.D., at Mahabalipuram⁸² are the gourd *vīṇās* but is held in various manners ranging from horizontal to leaning on the left which is different from the preceding examples.

However, the gourd held up to the chest by the left hand is most prominent during 9th - 11th century A.D. Shiva dancing on *nandi* sculpture from Dacca⁸³ dating 10th century depicts Shiva holding the *vīṇā* with both his hands. The gourd is on the left chest and the lower end of *vīṇā* has a box (pl.76). A terracotta plaque of brick temple, Paharpur⁸⁴, also shows the *vīṇā* in similar manner as described above. On an interesting carving of orchestra and dancer from Pawaya dating around the fifth century⁸⁵, two types of *vīṇā* occur simultaneously : the guitar type and the bow shaped *vīṇā* or *chitrā vīṇā* (pl.77).

Analysis and Comparison

Vīṇā found in India can be broadly categorized into three types : the harp or bow-shaped *vīṇā*, the guitar-shaped *vīṇā* and the gourd-*vīṇā*. The construction of *vīṇā* underwent various modifications, to suit the taste and temperament of the peoples of different ages.

The most primitive of *vīṇās*, the harp-shaped *vīṇā* was apparently evolved on the principle of 'bow and resonator' as it would appear from its plastic representations. It occurs even in the prehistoric rock paintings of Central Asia. This *vīṇā* was fashioned after the hunting bow, having the strings of gut, and may be regarded as the harbinger of all the musical instruments in the world. It was generally played upon with the help of finger nails or a plectrum.

The guitar-*vīṇā* has a pear-shaped resonator and a straight neck : the strings extend across the resonators flat top. There are holes in the top cover of the resonator. The *vīṇā* has small pegs to regulate the tuning by tightening or loosening them. It is generally played with the help of a plectrum.

The gourd *vīṇā* refers to the material used for the resonance chamber that is, the bottle gourd. A gourd of suitable size is cut in half and the half with the stem is used. A hole is made in this short stem piece and by means of it the gourd is fastened to the long, narrow wood body or neck. One end of this body is curved upwards, and to it one end of the single string is attached. In the other end of the body a hole is made into which is fitted a peg onto which the other end of the string is attached. By tuning this peg, the string may be tightened or loosened. For more than one string design of the *vīṇā* changes accordingly.(fig. 5 & 6)

Different postures are adopted for playing the different kinds of the *vīṇā*, but generally two of them are common, and they are vertical

(*ūrdhava*) and horizontal (*śayāṇa*). The paintings and sculptures, oblique postures of the *vīṇās* are sometimes found and they have also been mentioned in the Sanskrit treatises. Rhythm and tempo of the *vīṇā* are kept by cymbals and drum.

Out of the three types, evidences of only two *vīṇās*, the guitar-shaped and the gourd-*vīṇā* were found in Thailand dating before eleventh century A.D. The evidences of the harp *vīṇā* dating between sixth-thirteenth century A.D. were found throughout Southeast Asia, for example on the bas-relief in Nagayon Temple, Myanmar (pl.37), on the dancing Shiva carving in My-son A₁ from Champa (pl.47), in the hands of Tara from Ngandjuk, Java (pl.57) and also on the Angkor carvings. All these *vīṇās* have a thicker lower part that act as a resonator similar to the Indian harp or the bow-shaped *vīṇā* on the *Māndhātā* roundel of Amaravati (pl.63), orchestra and dancer bas-relief from Pawaya (pl.77) and the harp *vīṇās* of Nagarjunakonda (fig.5). The *vīṇā* was popular for quite sometime in Southeast Asia even after it went out of fashion in India which can be said judging from its appearance in hands of Tara and with Shiva *Naṭarāja* from Champa in My-son A₁ style dating from the eighth and the tenth century respectively. They can be observed even on the later twelfth century reliefs of Angkor (fig.3A). The instrument has however not survived in the whole of Southeast Asia, just as in India with the exception of Myanmar.(fig.6)

The guitar shaped *vīṇā* observed on the Dvaravati stucco (pl.27), in the hands of a musician on the right of the middle row of the 'Sudhana

beholds Maitraiya' bas-relief of Borobudur (pl.53) etc., bear striking resemblance to the *vīṇās* on Nagarjunakonda carving of musicians (pl.72), Nancha-kuthara bas-relief of musician couples (pl.73) and the descent of *Bodhisattava* carving of Amaravati (pl.74). The *vīṇā* player in the top-most row of the Sudhana carving has the resonator that is very narrow. This *vīṇā* is different from the guitar shape *vīṇā* already observed but seems to be just another modification of the same type. It substantiate the earlier statement that the Indian acculturation of Southeast Asia was not limited to a mere parallel development of forms and styles; the natives altered the desire of an art form or musical instrument to suit their own attitude and taste.

The gourd *vīṇā* on the Dvaravati stucco is carved in a crude manner and is held horizontally which is different from such *vīṇā* from other part of Southeast Asia like the *Nāṭarāja* sculpture from Cambodia (pl.41-42), Champa (pl.45) and in the hands of musician in Tra-kieu style again from Champa. However, the similar style of holding the *vīṇā* is seen on the *kinnara* stucco, Nakorn Pathom, Thailand (pl.28). The gourd *vīṇā* player on the Sudhana carving is holding the gourd down to his knee which is again different from the common position of holding the gourd towards upper side on the chest. These *vīṇās* are comparable to the gourd *vīṇā* on the Nancha Kuthara carving of musician couples (pl.73), in the hands of Shiva on *Nandi* from Alumpur etc., from India.

The Prah Ko inscription of Indravarman mentions of girls skillful in playing on the *vīṇā*, the Prah Einkosei inscription mentions the *vīṇā* among the list of the musical instruments and interestingly the Sadokkokthom II

inscription of 1052 A.D. mentions the donation of 100 *vīṇās* along with 100 female *vīṇā*-players and other musical instruments by Uttayadittayavarman. All these go on to prove that the *vīṇā* was the most important musical instrument and well established in Southeast Asia in the same manner as India.

3. Drums

One of the oldest musical instruments, drum is known to human since the time immemorial. In Indus Valley excavations, were found male figurine of baked clay playing an instrument which is circular in shape and held against their chest by a sling round their neck. This instrument appears small and marks the first stage of development of percussion instruments. In the second stage of development, the addition of a hollow body transformed the earlier tambourine into a drum. An interesting figure of a woman holds an hour-glass shaped drum under her left arm with the right face exposed for playing. On two seals also we see a fore-runner of modern *mṛdaṅga*. Among the percussion instruments, the one most frequently cited in the Vedas is the *duṇḍubhi*.⁸⁶ Nowadays, it is generally called *naqqārā* or *nagārā* in Northern India. There were in the *duṇḍubhi* two drums one big, and the other one small. It was played with a stick. It used to be played mostly in war, in the Vedic times. Later on, it was also played in the king's court, and in temples. *Bhūmiduṇḍubhi*⁸⁷ is the other drum that we come across in the Vedas. It was an earth-drum which was made by digging a hole in the ground and covering it with hide. It was played with a stick at the time of sacrifice. The *vanaspati*⁸⁸ was a wooden

drum. Another drum that is usually referred to is the *āḍambara*. Its exact shape and structure are not known. Yet another drum *gargara*⁸⁹ was used in war.

In the *Rāmāyaṇa* age, there were many varieties of percussion instruments.⁹⁰ There was the *duṇḍubhi*, the *bherī*, a kind of *mṛdaṅga*, the right side of which was struck with a stick and the left with hand, *mṛdaṅga* and *paṇava* - a kind of *mṛdaṅga* in which there was a hole in the middle of the body of the instruments and three strings were laid from one side to the other, the *paṭaha* - an instrument like the modern *ḍholaka*, the *dandhima* like the *ḍamarū* but a little smaller than it, *āḍambara*, a kind of *mṛdaṅga*. Technical terms like *kalā*, *mātrā*, *śamyā*, *pramāṇa*, *laya* and *tāla* - all pertaining to the playing of percussion instruments are also found in the *Rāmāyaṇa*. The instruments of drum class mentioned in the *Mahābhārata* are *mṛdaṅga*, *jharjhara*, or *jharjharī*, *bherī* *paṇava*, *āṇaka*, *āḍambara* and *duṇḍubhi*.

In the *Jātakas*⁹¹, it is said that *Bodhisattva* was a professional player of *bherī*. *Āḍambara* and *āṇaka* were also mentioned. In the Jain⁹², *Nandī-sūtra maddala* (*mardala*), *jhallarī*, *huḍukka*, *paṇava*, are few of the drums mentioned. Other Jain works⁹³ also note drums like *bherī*, *duṇḍubhi*, *muraya* (*muraja*), *muṅga* (*mṛdaṅga*), *diddima* (*dindima*) etc. In Tamil books like *Puranānūru* and *Pattuppāṭṭu* (A.D. 100 - 200)⁹⁴, three kinds of drum appearing under different names are the battle drum, the judgement drum and the sacrificial drum. In *Silappadikāram*⁹⁵, as many as thirty one drums are enumerated.

Bharata devotes an entire chapter to *avanaddha vādyas* in *Nāṭya-Śāstra*.⁹⁶ He describes in detail the make of these instruments, particularly of *mṛdaṅga*, *paṇava*, *dardura* and the technique of playing them. Bharata's *mṛdaṅga* was actually a set of three pieces, *āṅkika*, *ālīṅgya*, and *ūrdhvaka*. Likewise Kalidasa speaks of drums like *puṣkara*, the *muraja*, the *duṇḍubhi*, etc.⁹⁷ Even later, numerous types of drums were developed and perfected. Number of commentaries on their construction and playing were written. Even before 11th century fairly large number of drums of different varieties existed in India.

Sculptural depiction of drums has been profuse and varied. In the dancer and orchestra carving of Bharhut⁹⁸, a woman on the right of the musicians is playing two pieces of the *mṛdaṅga* namely *ūrdhvaka* (vertical) *mṛdaṅga* and *āṅkika* (horizontal) *mṛdaṅga* (pl.72). Other drums on Bharhut carvings are of the *ḍholaka* and tambourine type. The orchestra of monkeys shows one of the monkeys playing on an hour-glass shaped drum with two sticks. The drum is suspended from the right shoulder of monkey with a strap. From the shape the drum can be identified to be of *huḍukka* type.

On Sanchi, Nagarjunakonda, Amaravati and Mathura Sculptures similar drums are observed. The *Parinirvāṇa* of the Buddha carving three men playing different type of drums. The man on the extreme right is playing on a tambourine. Third man from the right is beating a cylindrical drum held almost vertically and suspended from his shoulder with a strap. Man in the center is playing on a horizontal drum similar to the *pataha* or

ḍholaka. On the western door of the Sanchi *stūpa* I a bas-relief shows a woman playing on two pieces of *mṛdaṅga* similar to the ones on Bharhut *stupa*. The same drums are being played by a woman on the left on the *Māndhātā* roundel; the other woman nearby is beating a *ūrdhvaka mṛdaṅga*. An hour-glass shape drum is seen tied on the belly of a dwarf in front on the descent of *Bodhisattava* (pl.74). A Nagarjunakonda panel illustrating 'The transportation of head-dress to heaven'⁹⁹ reveals the *duṇḍubhi* and the *paṭaha*.

In the fifth century sculpture of *Nāṭarāja* at Sirpur, Raipur (central India)¹⁰⁰, two drums namely the *āṅkika mṛdaṅga* in the hands of a woman and *ḍamarū* in the hand of Shiva appears almost invariably seen with all *Nāṭarāja* sculptures (pl.78). On the Pawaya carving of orchestra and dancer a woman at the back is seen playing on three pieces of *mṛdaṅga*. The Bharata era *mṛdaṅga* in three pieces are named as *ūrdhvaka*, *ālīṅgya* and *āṅkika mṛdaṅga*. The other woman on the right is playing upon a tambourine (pl.77). The *mṛdaṅga* of Bharata era are again seen on the painting of 'gāndhravas and *apsarās*' of Ajanta cave I dating seventh century. A woman on the right of the musician is playing upon the *mṛdaṅga* with one hand on the horizontal drum while the other on the vertical. A woman on the front is beating a long hour-glass shaped drum. The drum is held on the left side under the woman's arm and she is using her right hand to hit the drum on one side. (pl.79) The depiction of Bharata era *mṛdaṅga* (in three pieces) and hour-glass shaped drum seems to be fairly numerous in Indian sculptures. Both of them are again seen on the orchestra and dancing girl of Aurangabad dating seventh century. The

woman on the extreme right is seen with Bharata era *mṛdaṅga* while the woman on the extreme left is beating an hour-glass shaped drum (pl.80). Bharata era *mṛdaṅga* in two or three pieces are seen mostly with Shiva *Naṭrāja* and Vishnu *Trivikrama* sculptures.

A barrel shape drum¹⁰¹ is seen in the sculptures at Bharhut. The drum shell is separated in the middle by thin leather strap into which are interwoven, vertical straps in the two sections. The strapping is 'W'-shaped. This drum with the same pattern of strapping is seen in sculptures at Amaravati with two straps, at Sanchi with single strap, tied in the 'W'-shaped and the circular band consisting of two straps. The same drum of bigger dimension from Sanchi has double straps tied in this fashion is seen hanging from the roof of a Buddhist chapel. It is being played by men holding long thick sticks. Even today we see large drums, though not barrel but cylindrical, being tied to the roof near the *Sanctum Sanctorum*,¹⁰² in the temples of south India for example of Tiruttani Subrahmanya temple in the Sanchi representation, in these temples also it is sounded by thick long clubs. This drum is known as *bherī*. The Amaravati and Sanchi groups of drums show another type of strapping, in the manner of net. A small drum of this type is included in the musical band, employed in a procession, whereas the other type which is akin to the *bherī* is huge in size. It is seen suspended from a pole, resting on the left shoulders of two dwarfs near flying Monks. They have two thick clubs in their right hands, with which they strike both the drum-faces.(fig.1)

Besides the hour-glass shaped drum already mentioned the *ḍamarū* is invariably seen with all the *Naṭarāja* sculptures. The *Naṭarāja* from Sirpur mentioned earlier holds the hour-glass shaped drum in one of his right hands.(pl.78) Shiva *Naṭarāja* from Alumpur¹⁰³ dating eighth century holds *ḍamarū* in the top-most right hand. The *ḍamarū* is carved in great detail and one can see the string on the narrow part of the drum and the ball at the end of a string that strikes the drum can also be seen. A woman on the right is beating a vertical drum while a man on the left is playing upon a flute (pl.81). The Shiva *Viṇādhara* dancing on *Nandi* from Dacca¹⁰⁴ (10th century) also have the *ḍamarū* as one of his attributes (pl.76).

The other variety that appears on Indian sculptures is of cylindrical type. The cylindrical drum has been in existence continuously from the beginning of the Christian Era. Side by side with the barrel drums, it is first evidenced in the sculptured motifs in the Gateways at Sanchi.¹⁰⁵ It is mostly played in processions. The drum is held horizontally across the body of the player by means of leather strap. It is seen being played by two thick sticks held in the hands and the instrument is small in size. The strapping is parallel with central band, and the drum is held vertically and played by two thick sticks. In both the cases the performers are standing. Thus drum is strapped like a net. In the Ajanta frescoes, this drum with netted strap is held horizontally and struck with a curved stick. The Eastern Chalukyan drum from Jamidoddi¹⁰⁶ has cross-wise and parallel strappings. The free swing of the instruments by the drummers from left to right with their left hands placed over the body of the instruments is suggestive of the light weight of the drums and also the powerful influence of the rhythm of dance

over the drummers. Two of such drums are called *muraja* and *mardala*.¹⁰⁷ Difference between the two is that the second type is provided with more tuning gadgets and straps for minute adjustment of the tone. The other drum *mardala* has fewer strappings to control the tone. A cylindrical drum used by the tribals of Bihar, Bengal, Assam and Madhya Pradesh is called *mādal*¹⁰⁸ and it is perhaps the drum of the same variety.

On Nagarjunakonda panel illustrating 'A decorated Andhra stupa'¹⁰⁹ the *mardala* is represented thrice being played upon by celestial beings are shown playing upon the drums with curved drum-sticks on one face and on the other with fingers. One of them has raised the hand, which holds the stick so high as to suggest vigorous beating. *Muraja* is illustrated on an *ayaka* cornice stone from *stūpa* No.16.¹¹⁰ A dwarf is shown playing upon it with hands. The drum is made to dangle from his left shoulder by means of strap. The same drum is seen on the ninth century carving on the trapezoidal side panel of *mukhaśāla* at Muktesvara, Bhubhanesvar,¹¹¹ a woman in the center is playing on the drum. Two other women on side are seen playing upon the *paṭaha*-like drums. A flutist and a cymbalist are also seen on the panel. (fig.12)

Analysis and Comparison

From the survey of literature and sculptural depiction of musical instruments in the post-Vedic period it can be observed that the following membranophonic instruments were popular in India : *Mṛdaṅga*, *Paṇava*,

Paṭaha, Dardura, Dundubhi, Huḍukka, Ḍamarū, Jhallarī. A brief description of these and the comparison with Southeast Asia is given below:

The *Mrdaṅga*

Mrdaṅga, paṇava and *dardura* have generally been called *puṣkara vādya*¹¹² (*puṣkara* instruments). According to Bharata the *mrdaṅga* was invented by the sage Svati inspired by the sound of raindrops falling on leaf of blue lotus in a pond (*puṣkara*). Since the idea was derived from a scene of *puṣkara, mrdaṅga, paṇava, dardura* etc., came to be known as ‘*puṣkara*’. In Bharata, the word ‘*puṣkara*’ appears to be a synonym for a membranophonic instrument. *Mrdaṅga* of Bharata was not a solitary instrument as the *mrdaṅga* in Hindustani Music or the *mrdaṅgam* in Karnataka Music but as seen earlier consisted of three pieces.

The three pieces were called *āṅkika, ālingya* and *ūrdhvaka*. Bharata designated them all by one word - ‘*mrdaṅga*’ Just as in modern times, the word ‘*tablā*’ indicates two pieces.¹¹³ *Mrdaṅga* is mentioned in the inscription of Sadokkokthom II and the Prah Einkosei inscription of Jayavarman V which can be assumed to be of the same type. The sculptural depiction of the drums is also widespread in Southeast Asia. The *mrdaṅga* is seen on My-son A₁ of Champa, Sudhana beholds Maitreya relief of Borobudur which is similar to the orchestra and dancer carving of Pawaya (fifth century) and Aurangabad, seventh century (pl.48,53,77 & 80). The same drums but of larger size as seen on the Ajanta painting of *gāndhravas* and *apsarās*, can be observed on a music concert relief (fig.4)

and 'The Temptation by the Daughters of *Māra*' carvings of Borobudur. It can be said that, as in India, the *mṛdaṅga* was important and popular element of music ensemble in Southeast Asia.

The *Panava* and *Huḍukka*

Next of *mṛdaṅga*, *paṇava* was an important membranophonic instrument. There are references to it in Valmiki's *Rāmāyaṇa* and *Mahābhārata* and has already been noted earlier. The middle portion of the drum was narrow and a little pressed inside. The mouths were covered with soft skin which was tied tight by means of strings. In the middle of this instrument there was a hole and there were strings inside which resounded when the mouths were struck. The left hand held the central braces and varied the tension, thus effecting changes in the tone of the instrument.

Similar hour-glass shaped drum is the *huḍukka*. The instrument was hung over the left shoulder and the covered mouth on the right side was beaten with the hands. The left hand held the central braces and varied the tension and thus effected changes in the tune of the instruments. According to *Abhinavagupta*¹¹⁴, there is no difference between the general appearance of *paṇava* and *huḍukka*. Also some scholars¹¹⁵ are of the opinion that the same drum *paṇava* was called *huḍukka* in the medieval age. From this we are forced to consider *paṇava* and *huḍukka* as synonymous, especially from sculptural depiction that do not offer much detail about the make of the instrument. The drum is generally used by common folk like Kahara

tribe in U.P. and Bihar¹¹⁶ etc. The common term prevalent for the drum is *hudukka*, hence the drum is referred to by the same name in this research.

The *paṇava* is mentioned in Prah Einkosei inscription of 978 A.D. and is also seen on the Bayon relief of the procession from Cambodia (pl.43). The drum is held and played in similar manner as described above. A woman musician on the Ajanta painting of ‘*gāndharavas* and *apsarās*’ is playing on the same drum (pl.79). The same drum is also seen on the lap of the woman sitting to the left on the Aurangabad carving of orchestra and dancer (pl.80).

The *Dardura*

This was another membranophonic instrument in vogue during the time of Bharata. This was made of baked clay pitcher; its mouth was covered with skin which was tied tightly with strings. It was struck with both the hands. After a few centuries *dardura* came to be called *ghaṭa*.¹¹⁷ The drum is seen on the ‘prince and his consort enjoying dance and music’ (pl. 52) and the ‘Rounds of *Samsāra*’ relief of Borobudur, the same drum is on the eighth-ninth century carving from Alumpur, Papnashini of India (fig.9).

The *Paṭaha*

This again is very ancient drum. It is referred to in Valmiki’s *Rāmāyaṇa*, Bharata mentions it in his *Nāṭya-śāstra*. It is the same drum

that is called '*dholaka*' in common parlance.¹¹⁸ The drum is barrel shaped whose one side is covered with thicker skin than the other. Strings are tied across the instrument to tighten or loosen the membrane. The drum is mentioned in Prah Einkosei inscription and is seen on the Lara-Djonggrang relief of the dancers. (pl.55) The same drum is seen on the Ajanta cave I painting of musician group where one man in the front is playing on it (pl.62). Similar drums are observed on the carving of Nagarjunakonda, Nalanda and Sanchi. A small drum of the same type is seen on the 'Sudhana Beholds Maitreya' bas-relief where a man on the left is beating such a drum on one side with both the hands (pl.53). A carving on Nalanda, location - two depicts the same drum and the style of playing on it (fig.9).

The *Mardala*

The drum was almost cylindrical and one of the sides is only slightly bigger than the other and holes were pierced in the last portion of the skin. Through these holds straps of leather were strung tied and fastened towards the other end of the body. A paste was made by mixing ashes with cooked rice which was pasted in the middle of the left and right skin. This produced a deep and grave sound. Sarangadeva says that there is not much difference in the make of *mṛdaṅga*, *mardala* and *muraja* and that Bharata denominated them all by the name *mṛdaṅga*¹¹⁹. The drums of this type are seen on the music concert carving of Borobudur (fig.4) and on the Angkor carving of 'The battle scene of the *Mahābhārata*' (fig.3). However, the drums are completely cylindrical and resemble more to the *mādal* of the

tribes. Nevertheless such drums are seen on Sanchi sculpture and Ajanta paintings. All of the above drums are played with the help of one or two sticks.

The *Dundubhi*

The drum is similar to Indian kettle drum the *nagārā*, was also current in the time of Bharata¹²⁰. It is a very ancient instrument referred to a number of times in the Vedas. At first, it was largely used in battles. Later, it came to be used in temples or king's palaces. Its body was made of baked clay or wood or iron or copper. It was a big piece (hollow inside) with the mouth covered with parchment which was tied tightly with strings. As indicated earlier, Mahesh Kumar Sharan in his study about ancient Cambodia inform us about the use of *dundubhi*.¹²¹ The sculptural depiction of the drum is however, rare perhaps because it was not a concert drum. The instrument still survives in the same or altered form in some parts of Southeast Asia. Also its widespread use in India from the Vedic time leads us to believe that it was one of the drums popular in Farther India.

The *Bheri*

From the description given by Indian scholars, the drum seems to have been of two types. Thakur Jaydeva Singh¹²² believes *bherī* to be a *mrdaṅga* like drum which was struck on one side with stick and the other with hand. V.Premalatha¹²³, besides the barrel shaped *bherī*, writes about large cylindrical drum that was hung on a pole or some other support and

beaten by long thick clubs. On the Amaravati carving such a drum is carried by two flying dwarfs on a pole (fig.1). The inscription of Sadokkokthom II and Prah Einkosei refer to the drum *bherī*. Identifying from the description given by V.Premalatha, the drum can be seen on the Bayon carving of procession (pl.43). Such drums are also seen on 'The battle scene of the *Mahābhārata*' carvings of Angkor (fig.3). The *bherī* was used during war, the procession of king, in temples for announcement and it was perhaps also used as a concert drum (if it was barrel type). A large cylindrical drum hung in Buddhist temple of Thailand today is called 'Bh'el'(pronounced as *bhén*). It is beaten by long and thick clubs for announcement etc. The name as well as the use of the drum is similar to the Indian counterpart especially we are informed about the drum used in south India which is the same and serves similar purpose.

The *damaru*

The *ḍamarū* the favourite drum of Shiva is almost invariably seen with all the *Natarāja* sculptures. It is a small hour-glass shaped drum on the narrow waist of which a small ball is attached with a string. It is held in right hand and roll from side to side, when the ball strikes the covered mouth it produces rhythmic effects. It is used even today particularly in Shiva temple and for accompanied devotional and ritualistic music in India. The silver coin found from Lopburi dating seventh century has an hour-glass shaped figure believed to be *ḍamarū*. Number of *Shivalinga* excavated from the same region give some creditability to the assumption. The definite evidence of *ḍamarū* comes from Java where it is seen in the

hand of Chakra-chakra (pl.58). Though the carving dates early 13th century the detailed carving of drum goes on to prove that the drum was known in the region for centuries. As such the drum was depicted in Indian sculptures as early as fourth-fifth century A.D.

Other Drums

Besides the above mentioned drums there are other varieties that were used in India and evidences to them are observed in Southeast Asia. One of them is *jhallari*. Bharata has mentioned it as one of the *avanaddha vādyas* prevalent in his time.¹²⁴ Sarngadeva also includes it among *avanaddha vādyas*.¹²⁵ From the description given by him instrument in *Samgīta-ratnākara*, it appears that *jhallari* was like the modern *kañjirā* or *khañjari*.¹²⁶ The same drum was called *shallari* in south India.¹²⁷ The drum is however mentioned as *lāllari* in the Prah Einkosei inscription which is perhaps wrongly transcribed or was called by that name in the region.

Karadi and *timila* are other drums that are mentioned in the same inscription. The *karadi* was called *karadigai* in the south India. V.Premalatha¹²⁸ in 'Music through the Ages' writes that this was a cylindrical shaped drum with one drum head. The *timila* also was a kind of drum mentioned as *timilai*. Both the drums are among the numerous names of drums mentioned in the second century Tamil classic *Silappadikāram* and in various inscriptions of the Cholas and the Pallavas (especially

Rajaraja Chola D). It is amazing to find musical instruments from both north and south India mentioned in the same inscription.

4. Flute

The flute has several names like *baṇṣī*, *bāṇsurī*, *veṇu*, *vaṁṣī*, *kuzhal*, *murlī*, etc. It is one of the earliest instruments of the *sushira* (wind) variety. The origin of the flute is traced to the Vedic period. In the beginning it was known as *nālī*, as this bamboo-tube, produces *nāda*.¹²⁹ It can be definitely said that the flute came into existence when orchestra came into vogue. The *veṇu* and the *vīṇā* were the most essential instruments for accompanying orchestra. It is described in the ancient vedic works that the strings of the *vīṇā* were tuned on the basis of the *svara* of the flute. Thus the *svara* of the flute were considered the most authentic *svaras* in those days.¹³⁰

The flute by name of *veṇu* is also described in the *Rāmāyaṇa*, the *Mahābhārata*, the *Śrīmad Bhāgavata*, the *Jātakas* and the *Jain Sūtras* (as *Vaṁśa*). Bharata gives a detailed description of the flute and techniques of playing it in *Nāṭyaśāstra*.¹³¹ In the Tamil *Silappadikāram*¹³² the flute was classified into five types made of bamboo, sandal-wood, bronze, red catechu and ebony; the flute along with the *vīṇā* had highest recognition among musical instruments in those days.

The flute held in the normal posture - transversal appears in India with the art of Sanchi¹³³. This flute is not very long. The mouth hole is

within the limit of the first quarter of the length of the tube. The instrument is placed towards the right of the instrumentalist. It is not possible to distinguish the number of holes pierced in the instrument. The transversal flute, with extended tube exists in the sculptures from Gandhara as well as in the art of Amaravati¹³⁴. On the *Māndhātā* roundel a woman on lower side is playing such a flute (pl.63). A man is seen playing the same flute on the descent of 'Bodhisattava in form of white elephant'¹³⁵ carving (pl.75).

Flutes with slight alteration continues to exist in orchestra depicted at Pawaya and in Aurangabad Cave.¹³⁶ One of the women on the left is seen playing the flute on the orchestra with a dancing girl carving (pl.76, 77). The flute is almost always part of the orchestra with the dancing Shiva, the *Naṭarāja*. One such example is the eighth century A.D. carving of *Naṭarāja* with eight arms of Alumpur.¹³⁷ On the left is seen a man playing the transverse flute (pl.65). In Ajanta we observe two flutes of different lengths. The longer flute has its left end curved with the mouth hole pieced approximately in the center of the tube. The flute with shorter length is an ordinary one which has its mouth hole very near the left end. (pl.79) The circumference of these flutes is the same. The transversal flute is seen sporadically in the art of Ellora, in the Gupta art and in the art of Chandella, etc. The modern flute is to be seen in the *Govardhana* panel at Mahabalipuram. The flute again is seen invariably appearing with all Krishna sculptures of later period.

Analysis and Comparison

In the ancient times, there was neither a pitch-pipe nor a fretted or keyed instrument by which the key-note of a particular song or instrument could be fixed. It was only the flute that gave continuous note without any alternation or faltering, so the key-note of any other instrument could be fixed in accordance with a note of the flute. The flute was called *venu* or *vansi* because it was made of bamboo.¹³⁸ The word *venu* or *vamsa* means bamboo. *Vansi* means made of bamboo. Its player was known as *Vainuka*, while the *vīṇā* player was known as *Vainika* or *Vainavika*.¹³⁹ It was played by placing it horizontally near lips and blowing into its holes through the lips notes were brought out by a dexterous maneuvering of the fingers.

The flute is mentioned as *veṇu* in the inscription namely Sadokkokthom II, Prah Ko inscription and Prah Einkosei inscription of Jayavarman dating 1052, 879 and 878 A.D. respectively. However, clear depiction of the flute is on the sculptures of Myanmar, Champa and Borobudur carvings. On the musician group bronze sculpture from Payama Pagoda, Myanmar ninth century A.D., a man on extreme left is playing a transverse flute (pl.36). On the Borobudur carving of 'prince enjoying dance and music', two women on the left of musicians group are seen playing such a flute (pl.52). One musician on extreme left is holding the flute on tenth century A.D. *Naṭarāja* sculpture at My-son A₁, Champa. (pl.48) These flutes and styles of playing them are like their Indian counterparts, for example the two flute players on the Borobudur relief of the prince and his consort enjoying dance and music closely resemble the two flute players

on the gandharva and apsara painting of Ajanta cave I: (pl.52, 79) and the flutist on the Myson A₁ carving of *Naṭarāja* from Champa resemble the flutist on the *Naṭarāja* carving of Alumpur and so on (pl.48, 81).

5. Cymbals and Clappers

Rhythm is the oldest impulse of man. Primitive man used to express his emotions through dancing while experiencing pleasure and appeasing the gods and goddess he feared. So with a view to giving a definite form to the basic impulse humans must have created and designed some rhythmic instruments. In the beginning the primitive humans used to keep rhythm by stamping the feet and clapping the hands. Gradually rattles came into use which eventually evolved into idophonic instruments like ankle-bells, gongs, clappers, cymbals etc.

Cymbals and clappers were used to indicate and control rhythm of other instruments like the *vina*. In *Rig-veda* and *Yajurveda* cymbals are referred to as *āghāti*.¹⁴⁰ In *Atharvaveda* it is also called *āghāta*.¹⁴¹ In the *Rāmāyaṇa* Valmiki called them *tala* and in the *Mahābhārata* they are mentioned as *Kāñśya*. *Samatāla* indicated cymbals in the *Jātakas* while in the Jain works, the *Sūtras*, they were known by *kañśālā* or *kāñśya*.¹⁴² In Bharata's *Nāṭyaśāstra* the category of *Ghana* instruments include cymbals and wooden clappers. He also give a detailed descriptions of seven kinds of complex *tāla* structures.¹⁴³

Specimens of instruments in the form of curiously shaped blades of metal and wood, at one time considered to have been weapons of war, have been unearthed from the pre-historic cultural centers in the Indus Valley. In the absence of pictorial evidences in the seals and sealing their actual use could possibly be known only by referring to other contemporary civilizations such as the Mesopotamia and Sumer. Certain curiously curved blades were discovered at Ur on a gold cylinder seal, which dates about 2700 B.C.¹⁴⁴ On this seal are detailed a dancer in action to the strains of the lyre and is flanked by two attendants clapping the curved sticks in measured cadence. The *Karatāla* or the clapper which is an extension form of the hands, is an improvement on the beating sticks. This instrument is as old as the Indus civilization. In the early centuries of the Christian era, the *Karatāla* appears to be more popular than *kāṁśya-tāla*.¹⁴⁵ On the *Māndhātā* roundel of Amaravati two women are playing chimes. They look like two rectangular pieces of metal struck together to produce the sound (pl.63). The stone or wooden clappers were further modified into circular discs by removing the handles.

From the sculptural records, two types of cymbals are discernible viz., the flat discs and the bowl shaped one. The earliest representations of the cymbals with flat discs, which is also the earlier of the two types, is to be seen in the sculpture at Amaravati. This variety has continued to exist in the sculptures of medieval period at Khajuraho (13th century A.D.), and Chidambaram. It goes by the name *brahmatālam*, (also *jhānjha* or *jhālara*)¹⁴⁶ is seen in the Ajanta frecoes in Cave I of the fifth century A.D., in the early Eastern Chalukyan architecture at Badami (sixth century A.D.),

in the temple in Jamidoddi, of the Eastern Chalukya period (eighth - ninth century A.D.). Under the Shiva on bull figure at Dacca, tenth century A.D. (pl.76)

The second variety of cymbals in the shape of cups and flower buds are shown in the Gupta arts from about fifth century A.D. at Ajanta. Earlier than that, the Bharhut carving of orchestra and dancing girls have at least one woman playing rhythm instrument, perhaps cymbals. On *ayaka* cornice stone of Nagarjunakonda is carved a dwarf sounding the cymbals. They are simple and plain. Cymbals are depicted in number of painting of Ajanta. In the pictorial narration of the *Mahājanaka Jātaka*. Two women are seen holding cymbals of smaurize in the shape of flower in their delicate fingers. (pl.79) The cup shaped cymbals are depicted in Ajanta Cave I and XVII. In the later, in the painting of Indra and his troupe of musicians are included two celestial nymphs, holding a pair of cymbals each. The cups are detached from one another, and are held separately. In other painting of the dancer and musicians a man at the back is seen playing cymbals.(pl.62)

In the Nancha Kuthara carvings of *vīṇā* player and cymbalist the two women are seen sounding cup like cymbals (pl.73). In the seventh century A.D. carving of orchestra and dancing girl, Aurangabad, two women on the either side of the dancing girl are holding cymbals (pl.76). The cymbals with concave plate and flat rim, is depicted in the panel of the Wheel of *Samsāra* in Cave XVII at Ajanta and in a music panel at Darasuram (11th

century A.D.). Of these different varieties of cymbals, the cup shaped one seems to have been very popular in subsequent periods.

Analysis and Comparison

In the ancient times the singer used the palms of his hands in order to indicate the stressed, unstressed beat etc., of the *tāla*. There were even such professional *tāla* - indicators with their palms known as *pāṇika*.¹⁴⁷ It was not possible for the *vinā* player to indicate the *tāla* with his hands since they were engaged in playing the instrument. So either a *pāṇika* was employed to indicate the *tāla* or a *tāla vādya* was used for this purpose. Its very name shows that it was used for indicating the *tāla*. At first crude instruments like stone or wooden clappers were used which later gave way to the cymbals. Its general shape was like that of the modern *manjira*, but it was bigger than the *mañjirā* (*Brahmatāla* of earlier section). The *tāla vādya*¹⁴⁸ consisted of two metallic cymbals made of bronze (*kāñśya*). They were circular discs hollow inside. Each had a cord or cotton threads passing through a hole in its center. The disc which had comparatively high pitch was held in the left hand by means of the cord, and the other disc was similarly held in the right hand. The *tāla* was indicated dexterously by striking the two discs together. Each piece was either a circular disc or cup-like.

On Dvaravati stucco the woman between the two *vina* players is playing small size cymbals (pl.27). Considering the influence of Gupta and other art schools, the cymbals and the style of holding them is comparable

to all contemporary and preceding depiction of cymbals on sculptures and paintings of India; especially the Ajanta painting of *Gāndharvas* and *Apsarās* (pl.79), Orchestra with dancing girl of Aurangabad (pl.76) and the same cymbals are seen in the hands of women standing at the back, on the 'prince and his consort enjoying dance and music' carving at Borobudur (pl.52.). On the extreme left of the Dvaravati stucco the woman is seen holding what seems to be wooden or metal clappers. This is similar to the hand held chimes of two women musicians on the Amaravati's *Mādhātā* roundel (pl.63).

A slightly larger variety of cymbals than the one mentioned earlier is on the 'Sudhana Beholds Maitreya' carving of Borobudur. Two men on the either side of Sudhana in the top-most row are playing such cymbals (pl.53). These cymbals are similar to the cymbals in the hands of the musician at the back of the dancer and musician painting of Ajanta cave I (pl.62). The largest of cymbals, *brahmatāla* or *jhālara* which appear in the hands of the woman on the extreme left of the 'prince and his consort ...' carving of Borobudur are similar to the cymbals held by the human figurine under the *Natarāja* sculpture at Dacca (pl.67, also see fig.11).

The inscription of Hin Khon II dating eighth - ninth century mentions the donation of three '*kāṇṣatāla*', the cymbals to a temple along with the conch and other objects. *Kāṇṣatāla* are again among the musical instruments mentioned in the inscription of Sadokkokthom II (1052) and

Prah Einkosei inscription (978 A.D.). The Prah Ko inscription of Indravarman also mentions woman well versed in (playing or indicating) *tāla*.

From these evidences it can be said that : the cymbals were important element of music ensembles. Hence the cymbals are used in the Southeast Asia ever since the orchestra or music ensemble made their appearance in the region. It can be said safely that the cymbals that are used till date in Southeast Asia necessarily came from India.

6. Others

The bowed instruments

An ancient Indian instrument known as *Rāvaṇāstra* or *Rāvaṇa - hasta*¹⁴⁹ was played with the bow. It is associated with *Rāvaṇa*. Whether *Rāvaṇa* was the inventor of this instrument or its patron is not known. The form in which it has survived is that of half a coconut shell, hollow within and covered with dried skin of lizard and perforated below. It is played with a bow - a stick to which a string of horse-hair is attached. (fig.7) Another very old instrument played with a bow was the *pināka* or *pinākī vīṇā*.¹⁵⁰ Evidence to a bow instrument is the eleventh century inscription of San Chao Muong Lopburi that mentions the donation of a plucker and a fiddler. *Rāvaṇahasta* is mentioned in the plated of Mantyasih from Java, dated 917. The sculptural depiction of the instrument is rare in India and so far no evidence dating before eleventh century has been found from

Southeast Asia. In this condition A.L.Basham's opinion¹⁵¹ that the bowed instrument were not very popular till the coming of Muslim in India, holds true. Muslim invasion of India was intense only after the eleventh century.¹⁵²

Kāhala, Tūrryā and Shṛiṅga

As indicated earlier *kāhala* was instrument like modern *Shahnāi*. It is mentioned in *Yajurveda*, Jain *Sūtra* and the instrument was also prevalent during Bharata's age. The instruments resembling long trumpet are observed on Gandhara, Sanchi sculptures and Ajanta paintings. The use of animal horns is known to human since very ancient time. One of the very rare representation of such horn is seen in Cave II at Badami (sixth century). Such horn were called '*shṛiṅga*' in the north India and '*kombu*' in the south.¹⁵³ The horn used in war were called '*raṇashṛiṅgā*' meaning battle horn.¹⁵⁴ One common characteristics of all these, is that they can not produce melodious sound and their use was limited to ceremonial occasion, war and royal procession. *Kāhala* is mentioned in the inscription of Prah Einkosei. Straight trumpet or *tūrryā* (*tarayans*) were also observed from Javanese inscriptions (Chapter III). We see horn on the terracotta plaque from Myanmar of eighth century (pl.35). The battle horns are also seen on the Angkor carvings of 'The Titan of *Kālanemī* in his dragon chariot' (fig.2). The Bayon relief also has one man behind the large drum blowing a horn (pl.43).

Bells

The use of bells in temple is known in India for centuries now. It was known by the name like *ghaṇṭa*, *ghaṇṭika* or *jayaghaṇṭā*.¹⁵⁵ In south India the *jayaghaṇṭā* was also included in royal procession.¹⁵⁶ Prah Einkosei inscription mentions of *ghaṇṭā* and number of decorated bronze bells were also found from southwest of Chandi Kalasan, Java dating eighth century. However, it can not be considered as proper musical instrument and its use probably did not extend beyond temples.

7. The Orchestra

We find references in the Vedic literature that, the *vina* and drum (*puṣkara*) and other musical instruments used to keep rhythm of dances and songs of the dancers and the singers, and those combined musical instruments were known as musical concerts or simple orchestras. In the *Rāmāyaṇa*, the *Mahābhārata* and the *Harivāṃsa*, we often come across references about the group-singing of the Brahmins. Though different musical instruments were used in different auspicious occasions and in wars and funeral ceremonies, they cannot be considered as orchestra proper. Yet the practice of orchestra was in vogue before the Christian Era, as we find mention of proper forms of different kinds of orchestra in Bharata's *Nāṭyaśāstra*.¹⁵⁷

Bharata mentions *kutapa* (ensemble of musical instruments to be played together) and gives two important varieties of it, viz: *tata kutapa*, i.e., ensemble of string instruments and *avanaddha kutapa*, i.e., ensemble of membranophonic instruments.¹⁵⁸ These formed the ancient Indian Orchestra, Bharata gives a detailed description of this orchestra. However, *Nāṭyaśāstra* has described about orchestra (*kutapa*), in connection with dramatic performances and we find orchestra containing even greater varieties of musical instruments from sculptural record. These sources offer us valuable material in the study of orchestra practices through the ages. In this matter, a noteworthy feature is that ancient Indian sculptures both of north and south India, depict a group of musicians playing a variety of musical instruments on festive and religious occasions.

The first representation of Indian orchestra is in the sculptured pillars of the *stūpa* of Bharhut (second century B.C.) wherein the three constituents of a typical musical performance namely *Gīta* (singing), *Vādyā* (instruments), *Nṛītya* (dance), are depicted.¹⁵⁹ The troupe enacting this grand opera and composed entirely of female experts, consists of three groups of nymphs, each of four. The four dancers are performing on the right side of the stage. To the right of these dancers are seated the vocalists and instrumentalists. The four vocalists sitting in pairs facing each other, have joined their hands in the manner of clapping. The instrumentalists

consisting of two harpists, a drummer, and a cymbalist are sitting close to the songsters forming a semicircle (pl.71).

In another panel of the *Ajātasatru* Pillar of the Bharhut *stūpa*¹⁶⁰, the four dancers are seen on the left side, all standing in a row. The orchestral group minus one vocalist, is the same as in the previous one. Here again the drummers are near the dancers. The musicians sitting behind are surrounded by the instrumentalists as in the first instance.

On the *Māndhātā* roundel of Amaravati (second century A.D.) the left foreground has a group of female musicians and dancers. The musical instruments depicted here include the harp-*vīṇā* with long, horizontal plectra, hand-held drums, a conch-shell trumpet with an elongated, tubular mouthpiece, a transverse flute and what appear to be hand-held chimes consisting of rectangular pieces of metal struck together (pl.63).

The best reproduction of Indian orchestra, is that in a panel depicting dance scene from Pawaya¹⁶¹, exhibited in the Gwalior Fort Museum, datable to the fifth century A.D. It is the only one of its kind in which the triple aspect of Indian music, viz. *Gīta*, *Vādyā* and *Nṛitya*, as well as the representation of the three main families of musical instruments are well

delineated. The sculpture shows in the front two women playing on stringed instruments, the one on the right playing on the guitar shaped *vina* with five strings and on the other side a boat-shaped harp with seven strings. The dancer is seen in between these two. The second row consists of a flutist with the instrument in transverse posture and on the opposite side a player on a bowl-shaped drum. In the rear part of the stage are seated four women, three in a row and a fourth a little behind in between the dance-director and another drummer playing on the Bharata era *mrdaṅga*.(pl.77)

In the frescoes of Ajanta, the palace scene painted instrument cave 1 portrays some episodes of the *Mahājanaka Jātaka*. In the fresco a king is seen sitting with a princess of dazzling beauty in a magnifiscent pavilion, where all the luxuries articles of life have been arranged to attract his attention. To the right of the royal pavilion is painted a dance performance in progress. At the right end of the chief dancer are two ladies of copper complexion playing on flutes. Including these the orchestra comprises seven artists. Of the remaining five artists, two of them are playing cymbals, one of them must be the dance director while the other her assistant who is also a vocalist; one playing on Bharata era *mrdaṅga*, another on a *huḍukka* drum; and the fifth apparently a guitar like instrument, for, a gourd-like thing is visible on her lap.(pl.79)

At Aurangabad Cave VII, Orchestra with dancer carving has; to the right of the dancer drummer with *huḍukka*, behind her is the flutist and the third one is the cymbal player. On the left side in front is the lady playing on the Bharata era *mṛdaṅga*. Next to her is another cymbal player and at the back the third drummer. The two drummers in front are seated on the ground, while the rest are sitting on platforms on either side, which slopes down in front (pl.80).

Shiva *Naṭarāja* with orchestra always have at least three types of instruments; the drums, flute, cymbals and at times *vīṇā*. For example the eighth century A.D. *Naṭarāja* at Ellora Cave XV has all the above instruments except the *vīṇā*.

Several panels adorning the circumambulating path in the Lakshmana temple at Khajuraho, depict music concert in progress. One of them shows a vocal duet accompanied on the *vīṇā* and the drum. The musicians both female and identically dressed are seated in the center. The *vīṇā* player is seen on the left end and the drummer on the right end. (fig.12)

Analysis and Comparison

Orchestra is defined as body of instrumental performers or a combination of different classes of musical instruments. From the preceding evidences we come to know that Indian orchestra consisted of *vainika*, *vaṃśa* - *vādaka*, *mārdalika* or *pāṇavika* or *dārdurika*.¹⁶² It can be divided into four main classes,¹⁶³ players of the *vīṇā*, flutists, drummers and the player of cymbals. The players were of three classes,¹⁶⁴ *uttama* (best), *madhyama* (medium) and *adhama* (trite). The orchestra (*kutapa*) was arranged like *alātācakra* i.e., in a circle. (These have been fully dealt with *Srangdeva* in the *Sangīta-ratnākara*).¹⁶⁵ Bharata¹⁶⁶ goes on to describe the arrangement of the musical instruments. He says that on one side of the stage the leading drums should be placed facing east along with the other drums on its sides. On the other side the vocalists should sit with the instrumentalists (wind and stringed). In this arrangement it is highly significant that the stringed instruments are given the front seats. This is accounted for two reasons. In the first instance, from the acoustics point of view the timber of the stringed instrument is more feeble and soft than those of the wind and percussion instrument. Most of the orchestras depicted in sculptures of later period followed this type of arrangement. For example orchestra and dancer at Aurangabad cave (pl.80), Orchestra with dance from Pawaya (pl.77) and the other orchestra on Ajanta fresco.(pl.79)

The archaeological evidences of the ancient Indian orchestra, mark a definite stage in the development of Orchestra (*Vādya vrīṇḍas*),¹⁶⁷ in which instead of depicting group performances of musical instruments of one and

the same category, they show an ideal form of the orchestra which includes representatives of different types of musical instruments, the selection of the instrument being different in each representations.

It can be assumed that different types of musical instruments adopted by Thailand as a result of Indian influence were played together following some format, most probably ones that were popular in India during and after Bharata era. The Dvaravati stucco shows four musicians, however the musical instrument played by them are of only two types; chordophonic and ideophonic. This is a very simple form of orchestra accompanied with singer.

The inscription of Phaenthongdaeng U Thong (eighth - ninth century A.D.) record offering of dancers and singers along with other articles to Shiva by King Harshavarmana; the inscription of Sadokkokthom II clearly mentions donation of four different types of musical instruments namely the *vīṇā*, flute, cymbals and drums; also inscription of Prasat Hin Phnom Rung III (11th century A.D.) inscribes about donation of four musical instruments which can be assumed to be of different types. The inscription of Prah Ko mentions of beautiful girl expert in dancing, vocal and instrumental music; girls skillful in playing *vīṇā*, flute and in indicating the *tāla* or playing cymbals. A large numbers of musical instruments are named in the inscription of Prah Einkosei. Though it is possible, it is difficult to say authoritatively whether all of them were played together. However one thing is clear that, the inscriptions themselves are adequate to prove that the orchestra were well adopted from India in the region of Thailand. We have

already seen about the prevalence of dancing and singing and they almost always need a backdrop of a music orchestra. These give further weight to the above argument.

The bronze sculpture from Payama Pagoda, Myanmar (ninth century) shows three men playing musical instrument namely the flute, the cymbals and the drum (pl.36). The tenth century *Naṭarāja* carvings from Champa are accompanied once by the *vīṇā* and drums (pl.47) and the other by the flute and drum (pl.48). Most notable of these are the reliefs of Borobudur. The music concert carving shows at least three drummers, a flutist and two *vīṇā* players.(fig.4) The Sudhana relief shows all four classes of musical instrument together (pl.53). There are two drummers, a flutist, two cymbalists and three *vīṇā* players. Of these the most striking is the orchestra that accompanies dancer on the prince and his consort relief (pl.52). The arrangement of the musician in the carving is akin to the orchestra depicted in the Indian art. It can be observed that the flute players are near dancer and the audience while the drummer and the cymbalist are away. Even on the music concert carving (fig.4), two *vīṇā* players and a flutist are sitting in the front row while the drummers are standing at the back. Both orchestras are similar to the orchestras on Pawaya and Aurangabad carvings (pl.77,80) where it can be observed that the *vīṇā* players and flute are near to the dancer (because the sound of the instruments is feeble) while the drummers are sitting away (because the sound is loud). This shows how faithfully the people of Southeast Asia adopted the form and arrangement of orchestra from India and it can be assumed that the same format was followed in the region of Thailand.

The Indigenous Musical Instruments

We have seen in Chapter II that the natives of Southeast Asia used various musical instruments like the *Mahoratuk*, the bamboo wind instrument like jew's harp and probably xylophone etc. Later when Indian civilization spread into the region the Indian musical instrument were used by the elite class that adopted Hinduism and Buddhism as their religions. The musical instrument of the natives were used by the tribals or people of low class who remained unaffected by the Indian culture. There seems to be a clear distinction between the two classes of people and hence the musical instruments.

The division of people among classes was perhaps under the effect of the Indian caste system. As in India there was hierarchy of classes. The top-most cadre included royal family and priestly i.e. *kṣatriyas* and *brahmins*. Following them were ministers, army leaders, advisors, inspectors, district heads, village chiefs, chiefs of labor etc. That still formed an upper class. About the people in the lowest cadre Coedes writes....

“We know very little about the life of the peasants and the villagers except that they must have been impressed in great numbers as servants in the service of the sanctuaries and monasteries or hermitages with which the piety of the ruling classes continually covered the countryside. The inscriptions give interminable lists of names of these slaves about whom we know nothing but their names which are often very uncomplimentary

epithets (“dog”, “cat”, “detestable”, “stinking”) that signify the scorn in which these people were held. These names have weathered the ravages of times and been passed on to posterity.”¹⁶⁸

Though the above statement was made about the ninth-tenth century kingdom of Angkor, similar situation can be assumed for the rest of Southeast Asia. With the exception of Borobudur, the representations of the native instruments in the inscriptions and sculptures have not been observed so far. Even the possibility of the interaction between the two classes of instruments can be safely ruled out. On the Borobudur relief illustrating ‘*Karmavibhanga*’¹⁶⁹ are shown people who enjoy ‘worthless entertainment’ (pl.54). The text says that they will be born as people of inferior status. All the instruments depicted on the carving are indigenous and the people who are playing them belonged to a low class; they are perhaps peasant or tribal. The music is termed as ‘worthless entertainment’ and people on the right who are committing a sin for which they will be punished by being born as people of inferior status in their next life. From this it can be said that the music of the native instruments was considered inferior or even detested. In the same series of reliefs, one more carving shows people of lower and higher birth. People on the left are similar to the low class people in the preceding example. There are musicians, jugglers and dancer. One of them is playing on a cylindrical drum that resemble *mādal* of Indian tribals and a woman at the back is playing what seems to be some sort of cymbals or clappers. To the right are seated, what text called as virtuous people. They wear cloth and ornaments completely different from the group on left and are also sitting on an elevated platform.

This relief further manifest the division of people among various classes, even in Buddhist society. Contrary to these, people of higher class or god in heaven are shown enjoying music of sophisticated instruments like *vīṇā*, pot-drum, *mṛdaṅga*, flute, cymbals, etc., that came from India.

Probably, there were more native instruments than we know of but because of the above mentioned distinction we are not left with any concrete evidences about them.

Speaking about the present day Thailand, though a wide variety of instruments are used in the country, there are clear division like, royal, classical and folk music. Out of these royal and classical music are the most important and the folk music is almost dismissed. It is considered not very important, temporary and ever changing. Also there are few efforts to save it as heritage. Such an attitude is perhaps remnant of the above mentioned division that remained the same for centuries.

Almost opposite situation exists in India today. Each region of India has a set format of folk music. It is respected and preserved as national heritage. Most people even enjoy folk music. Sometimes folk songs and music also form a part of popular entertainment. It is surprising to find difference between the attitude towards folk music in both the countries considering the similarity in the history of division among classes that existed in both the countries simultaneously.

The Legacy of Indian Musical Instruments

Number of musical instruments are used in Thailand today. The instruments are, either of indigenous origin or borrowed from India and China. Many of the instruments have remained in the original form in which they were received, while the others have gone through number of changes in years to suit the taste and temperament of the people. Besides these, some of the instruments were even inspired by the ones that were used in India and other countries. Even after eleventh century the contact between India and Southeast Asia was not broken. Though this study is concerned with musical instruments before eleventh century, the following is a brief and primary attempt at tracing the elements of Indian musical instruments in present day Thai music.

In Thailand, three types of orchestras¹⁷⁰, called *pi-phat*, *kruang sai*, and *mahori*, exist. The *pi phat* which plays for court ceremonies and theatrical presentation, uses melodic percussion; gongs in a circle (*kawng wong yai*), xylophone (*ranad ek* and *ranad thum*), cymbals (*ching*), drums (*glawng that* and *ta phon*) and a blown reed (*pi nai*). The *kruang sai* performs in popular village affairs and combine strings; mono-chord, lutes and fiddles (*saw-u*, *saw duang*, *saw sam sai* and *jakhay*) and wind instruments (*khlui*); while the *mahori*, as accomplishment of solo mixes strings (*jakhay*, *saw-sam sai*, *saw u*, *saw duang*) and melodic percussion (*kawng* and *ranad*) with the winds (*khlui*). All three ensembles are provided with a rhythmic group of drums, cymbals and a gong to punctuate the melody parts.

The following is the list of musical instruments that were adopted or inspired by Indian musical instruments. Also included is a brief description and their use.

Idiophonic

- Wooden clappers

Called as *grap khu*¹⁷¹, it is made from a section of bamboo cut in half. The *grap khu* were also made of hardwood in the same shape as the bamboo type and played in the same way. It is used in instrumental numbers which included singing and in instrumental accompaniments to dancing. The instrument is sounded together with cymbals. Similar use was seen in case of the Dvaravati stucco.

- Cymbals

Three types of cymbals are used in Thai ensemble⁷²: small size (*ching*), medium size (*chap lek*), large size (*chap yai*). They are indispensable element of ensembles as their function is to keep time and beat the rhythm. We have seen all of these in our foregoing discussion.

Membranophonic

- *Ta phone*

This instrument according to Dhanit Yupho¹⁷³, is the same drum called *mṛdaṅga* or *maddala* in India, that is from the heads at either end the body tapers outward gradually to a bulge at the middle of the body - making the body barrel - shaped. Even the legend about Brahma being the inventor of the drum is prevalent. *Ta phone* is only single drum and not like the three pieces of Bharata era *mṛdaṅga*. However, the *mṛdaṅgam* of Karnataka music is also a single drum that perhaps evolved from Bharata era *mṛdaṅga*. In India this type of drum is played held on the lap, or suspended from straps over the shoulder when played while standing. As for the Thai drum, it is put on stand and played on both heads with the palms of the hand and the fingers. There are a few more varieties of this kind of drum namely *Ta phon Mon* and *glawng ta phon*.

- *Tho . n*

The *tho.n* or *thap* is a drum that looks like an inverted vase, with one drum head. The round drum head is stretched by thongs or cords attached to it. The *tho.n thap* has probably been used in musical ensembles for a long time. It is mentioned in regulations of the royal court that belong to Ayutthaya period (after 14th century A.D.). At present time there are two different types of *tho.n* known as *tho.n cha-tri* and *tho.n mahori*. Dhanit Yupho compares the word *tho.n* with *ḍhola* (*ḍholaka*) and *thap* with *tabla*

of India.¹⁷⁴ The drum is generally accompanied by a bowl shaped drum called the *ram mana*, the *tho.n* held under left arm on lap while the *ram mana* is kept on the right. Dhanit Yupho further write that if the Thai drums did not come from India, its origin cannot be accounted for.¹⁷⁵

- *Ban Daw*

The Indian *ḍamarū* is called *ban daw*¹⁷⁶ in Thailand. The drum is used to furnish the rhythm of musical accompaniments for certain royal ceremonies, such as those in which the royal seven-tiered umbrella is used- coronation ceremonies and royal anniversaries and in the ceremony in which the king officially receives a new white elephant.

Aerophonic

- *Khlui*

The flute in Thailand is called *khlui*¹⁷⁷. The important difference between the flute we observed till now and the flute of present day Thailand is that, while the former was played horizontally, the later is played vertically. It is difficult to say whether the Thai invented the instruments or it evolved from the Indian transversal flute.

- *Pi - cha nai*

The *shahnāi* is called *pi-cha nai*¹⁷⁸ in Thailand. The instruments became popular in India after coming of the Muslims. Mostly it is believed that it is an Iranian instruments. To this many scholars have come up with serious argument. These scholars¹⁷⁹ maintain that *shahnāi* is *sunādi* mentioned in Ahobala's '*Saṅgīta Pārijāta*'. Whatever that maybe, in Thailand it is believed that the instrument was adopted from India. In olden days it was used with horn trumpet and conch-shell trumpet when the king appeared in royal ceremony. Later the *pi cha nai* was also used in royal procession. Nowadays it is generally used with the orchestra accompanying funeral ceremony. However the place of *pi cha nai* is now largely taken up by *pi chawa*. The name itself suggests that the instruments came from Java. Nevertheless, it is assumed that Javanese took model for this instruments from India also, modifying only the length. *Pi mon* is also instruments of similar variety but considerably bigger than the former two.

- *Trae ngawn*

An instrument of horn variety, the instruments is believed to be derived from the Indian *shṛiṅga*¹⁸⁰. In south India it was called *kombu* and evidences to this dating before eleventh century have already been cited in preceding section. The *trae-ngawn* along with the *trae-farang* (European trumpet) and the *sang* (conch) is used in royal ceremonies involving dignitaries such as those in which the king officially and publicly welcomes

diplomats. It is also used in military processions both on land and water and other processions of a similar nature. On these occasions the *trae* and *sang* (conch) are played together in honor of the king.

- *Sang*

The name *sang* given to conch-shell trumpet is obviously remnant of Sanskrit word *śankha*¹⁸¹. The use of conch in temples and processions etc., from early centuries of Christian Era has already been noted earlier. It is used only in ceremonies of the highest dignity, honor and esteem, together with the *trae-ngawn* and *trae-farang* (European trumpet). The conch is looked at with great respect by the Thai and it is very important musical instrument for royal ceremonies.'

Chordophones

-*Phin nam tao*

Phin nam tao means 'a string instrument made from a bottle gourd'¹⁸². The instrument has one string similar to the *ekatantrī vīṇā* and has a right gourd as a resonator. Its evolution from the *ekatantrī vīṇā* is more than obvious. The instrument sometimes accompanies the ensemble and at other times used by solo singer along with cymbals.

- *Gra-jap-pi*

It is a four string-lute. The name *gra-jap-pi* comes from the Javanese word '*gatchapi*', which in turn comes from the Pali-Sanskrit word '*gatchapa*' which means a turtle¹⁸³. It is believed that the instrument came from Java during the time of Srivijaya. However, many Indian scholars¹⁸⁴ inform us that it is the *vina* called '*kacchapī*' that is mentioned in many *Brāhmanas*, the *Jātaka* and in Bharata's *Nāṭya-śāstra*; they are of the opinion that though the instrument is extinct in India it still survives in Java.¹⁸⁵ If it is true the instrument itself or its modification was indirectly received from India itself. The *serng* is a similar instrument only of much smaller size.

- *Jakhay*

The famous crocodile zither of Myanmar is similar to *Jakhay* of Thailand and Cambodia. The word '*jakhay*'¹⁸⁶ comes from '*jaw-ra-khay*' meaning crocodile. In the old days the case or body of the instrument was made in the shape of crocodile and the front part carved to represent the crocodile's jaws. However, the instrument is much different in shape today. It is the lead instrument in *kruang sai* and *mahori* ensembles. It is generally accepted that the instrument was derived from the Indian *mayurī vīṇā*.

Similarly in the other countries of Southeast Asia also the Indian musical instruments have left lasting impression. The cymbals, the flute, the *shahnāi*, or their modifications and some type of drums are practically everywhere in Southeast Asia. Besides these, starting from Myanmar, uses double headed drums, monochord with gourd resonator, the crocodile zither that we came across earlier, the buffalo horn, the famous Burmese arched harp the *saung gauk* that evolved from the ancestors like the *chitrā* and the *vipañchī vīṇā* and so on. The instruments used in Laos and Cambodia are much same as the ones that are used in Thailand.

Indonesia uses a zither called *kachapi* as indicated earlier, transversal flute, conch-shell, monochords, clappers, bells, guitar type string instruments and various drums which are cylindrical, goblet shaped (like *nagārā*), hour-glass shaped drum, barrel shaped drum etc. Also, Vietnam uses some of the instruments that were derived from Champa like wooden clappers, conch trumpet, double headed drum, horn etc.

Interestingly, Malaysia even retains some of the names of Indian instruments. For example, the goblet drum is called *negara*, cymbals are called *kesi*, and *shahnāi* is called *serunai*. Besides these, there are horns, monochords, barrel-shaped drums, cylindrical drums and so on.

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Chapter V

Conclusion

Music is one or the other form has prevailed in human society since the prehistoric time. However primitive, the society had some 'musical instruments' to express emotions. The early human expressed his cheerfulness or worshipped spirits and fire with crude instruments especially idiophonic like stones, sticks, bones etc. The dance that might have accompanied the worship needed a rhythm which was provided by these instruments. Whistling, hooting, clapping and thumping feet also aided in building the tempo of the rhythm. Gradually, the primitive instrument gave way to slightly sophisticated ones that even permitted the expression of more diverse emotions. These early instruments certainly played a part in the later development or adoption of music.

In Thailand one of the earliest possible musical instruments is the lithophone. The six pre-historic long stone adzes found from Nakorn Srithammarat whose different sizes and holes at one of their ends indicate that the adzes were used as instrument to produce rhythmic effects. The various sizes of the supposedly discarded tools are capable of producing at least five different notes. The instrument perhaps marks the first stage in the development of the modern xylophone which is one of the most important instruments played in the ensembles of Southeast Asia. The lithophone might have given way to similar bamboo xylophone which is however based on conjectural evidences. The radical division between the two classes of musical instruments namely indigenous and Indian

instruments did not allow the representation of xylophone in epigraphy or sculpture which was dominated by the Indian aspects of culture including the instruments. Even if the xylophone developed at a much later stage, the earliest known evidence of which dates back to 14th century where it appears on the inscription of Po Khun Ramkamhaeng I, the lithophone indicates the tendency of the people of this region towards using such an instrument.

A historical citation of mouth organs and jew's harp in the Chinese *Shih Ching* shows that bamboo wind instruments were widely used way back in eighth century B.C. Such instruments are widespread even today and their general appearance in like number of flutes collected in a bunch. A common characteristic of these is that one flute acts as ostinato while the rest make a melody. However even such an antiquity of these instruments has not earned them a place in classical orchestra anywhere in Southeast Asia. Their use is in fact, still limited to rural areas.

Mahoratuk, the bronze drum dates earlier than 1000 B.C. The origin of the drum is assumed to be in the northern part of the old Khmer empire. However, the issue of its origin is still much debated. The oldest of such drum found in Thailand belong to the Dong-son age dating around 400-300 B.C. The drum was important ceremonial instrument among the tribal people. Different rituals and beliefs are associated with the *Mahoratuk* among different tribals which can be as old as the drum itself. Among some tribals the drum is a sign of leadership, the person having the biggest *Mahoratuk* is the chief. Most of the times the drum was buried with

the dead chief. During the funeral ceremony the drum is beaten to summon the spirit of the dead. Chinese documents inform about use of the *Mahoratuk* to gather warriors and to declare victory. As it was a sign of leadership and sovereignty the drum's capture perhaps meant surrender or defeat. Some tribes beat the drum for spirit eviction and to protect their crop. The statuettes of frog and figures of snail, scallop, etc., signify the drum as a tool for requesting rain from the almighty. Considering the rain-fed agriculture it was perhaps very important and auspicious. However, function and status of the drum in the society has not changed through the centuries. The only exception being that the antiquity of the drum has prompted its use in Thai royal court.

Nevertheless, the *Mahoratuk*, is considered as ancestor of gongs that play an important role in the orchestras throughout Southeast Asia. Some of the gongs are also assumed to have come from China around sixth century but they were accepted in the classical ensemble only after the 14th century. It is difficult to adjudge how the gongs were used before eleventh century. It can be assumed that they were beaten for public announcements or during worship in temples.

The painting found in Ta-Duang cave, Kanchanaburi dating, around 2000-3000 years depicts what seems to be large drums carried on poles. It is very difficult to assess the nature of the drums especially because there is no follow-up evidence to such a drum till very late around 12th century.

Such drums appearing on the Angkor and Bayan reliefs, however seems to be adopted from India as other musical instruments played together with them are necessarily Indian.

In general before the Southeast Asian people came in contact with the Indian civilization, the bronze *Mahoratuk*, bamboo percussion and wind instruments predominated the aboriginal music. The membranophonic instrument may have prevailed but we do not have any definite evidence about them. It can be assumed that these instruments were used for the worship of spirits, in battles, for celebration, dancing etc. One outstanding feature of these instruments is that, barring the bamboo mouth organ and jew's harp all of them are percussion instruments. Hence it can be said that the percussion instruments predominated music of the aborigines. There preponderance for centuries, perhaps played a key role in the dominance of percussion instruments in Southeast Asian ensembles.

The spread of Indian civilization to the region from the first century A.D. brought about revolutionary changes in the life and culture of the people. However, the trade between the two was subsistent well before the Christian Era. The major incentive for the Indian traders was the natural wealth of the Southeast Asian region. Both land and the sea routes were used by them but the sea route was more popular as it provided easy access to the Indonesian archipelago also. Almost all parts of India influenced the early kingdoms of Southeast Asia, however, the influence of southern India on the whole was preponderant.

Hinduism and Buddhism brought in their train the Indian way of life. The Indian settlers, the majority of which comprised of Sanskrit scholars, monks and priests peacefully introduced skills, social patterns and religions of the civilization. From this Indianization was born a series of kingdoms that in the beginning were true Indian states: Cambodia, Champa, and the small states of the Malay Peninsula; the kingdoms of Sumatra, Java, and Bali; and, finally, the Burmese and Thai kingdoms, which received Indian culture from the Mons and Khmers. Such was the power of Indianization that the native culture virtually lost its identity. There was clear division among classes. The kings adopted Hinduism or Buddhism as their religions. The Brahmins were royal chaplain and advisor. The themes of the *Rāmāyaṇa*, the *Mahābhārata*, the *Jātakas* and the *Purāṇas* became source of inspiration and moral guide. The *Dharmashāstras* and the *Arthashāstras* became framework for social, economic, political and administrative systems.

The first of these kingdoms, was Funan which was the most powerful kingdom for around five centuries. A king of Funan named Fan-chan in 243 A.D. sent a gift of musicians and, other products of the country to the Chinese emperor. As the kingdom was already Indianized it would not be wrong to assume that the instrument were Indian. Also in the description about the customs of Champa Ma-Tuan-Lin talks about conches, drums, stringed instruments and flutes as the musical instruments of the country. Even the customs described by him were totally Indian. From this we can conclude that along with other aspects of the civilization Indian music also made its appearance in Farther India right from the first

century A.D. As the Indianization was very intense from the second up to fourth century the Indian musical instruments must have completely established themselves by then.

The time Indianization began in the Southeast Asia falls under the post-Vedic period in India. The Vedic period had already seen the development of number of musical instruments. The *vīṇā* of harp or bow type occupies the most prominent position followed by the flute, the drums like *duṇḍubhi*, *mṛdaṅga*, *paṇava*, *paṭaha* etc., cymbals were used to indicate rhythm and conches were blown on various auspicious occasions and at the time of war. It was perhaps around the first century A.D. when Bharata composed *Nāṭya-Śāstra* the oldest book available on dramaturgy and musical theory. Bharata not only classified all musical instruments into four classes but also laid down set rules for making the instruments and the techniques of playing them. The rules set up by Bharata made the basis of Indian music around that time and they had profound impact on the depiction of musical instruments in sculptures and painting. Even after Bharata the development of Indian music and musical instruments did not cease; number of musical instruments were either invented or modified.

There were almost parallel developments in arts, architecture and society between Indian and Farther India. The statement is well supported by the changes in design of the conch appearing in the hands of the deities of the two regions through the centuries demonstrated earlier. Also the prevalent forms of art and style quickly found their way to Southeast Asian region and the musical instruments were not an exception. From this, it can

be said that though the evidences of musical instruments for the first five centuries of the Christian Era are rare, they can not be different from those that were used in India around the same time. This is also confirmed by the musical instruments noted by Ma-Tuan-Lin in Champa in the fourth century which he said were similar to those of Funan.

In India, the *vīṇā* undoubtedly had the highest recognition. All the stringed instruments were known by the name of *vīṇā* and it falls under *tata* category of Bharata's classification. As the earliest *vīṇā* developed from the hunting now it was bow or harp shaped. In the early Indian art of Sanchi, Bharhut, Amaravati and Nagarjunakonda the harp is represented very frequently. Lower portion of the *vīṇā* was of wood, shaped like a boat that served as a resonator. The *vīṇās* of this type were known as *chitrā* and *vipañchī*; the *chitrā vīṇā* was seven stringed while the *vipañchī* was nine stringed and played with a plectrum. The *vīṇā* was very popular up to the fourth and fifth century but becomes rare afterwards. The early kingdoms of Southeast Asia must have used the harp shaped *vīṇā* which is confirmed by Ma-Tuan-Lin as he talks of cithern being one of the instruments used in the fourth century Champa (and Funan). However, the use of this *vīṇā* in Southeast Asia continued till quite late, as seen in the sculptures of Champa, Myanmar, Cambodia and Indonesia which date as late the 10th-12th century. The *vīṇā* was also observed on the 12th century reliefs of Angkor Thom. The instrument still survives in Myanmar and it is called *saung-gauk*. However, as in India the instrument survives nowhere else in Southeast Asia.

The harp shaped *vīṇā* was replaced by the guitar shaped *vīṇā* around the sixth century. Though it appears in the early sculptures of Gandhara, Amaravati and Nagarjunakonda, it became very popular after the sixth century. It continues to be seen on the fifth century relief of Pawaya, the sixth century paintings of Ajanta, the seventh century carvings of Ellora and so on. The *vīṇā* is seen on the Dvaravati stucco, on Borobudur reliefs and on the carvings of Champa. The *vīṇā* generally had five strings. Even the modified version of the guitar type *vīṇā* are frequently seen on the ninth century Borobudur carvings. All these depictions of the *vīṇā* in Southeast Asia dates after the sixth century but the *vīṇā* may have been in use well before that.

In the eighth century the guitar *vīṇā* is in turn superceded by the early form of modern *vīṇā*, with long finger-board and small round body, made of a dried gourd. This *vīṇā* also appears earlier in the Indian carvings. Numerous depictions are seen from the fifth century Nancha-kuthra carvings to the Shiva *Vīṇādhara* dating ninth-eleventh century. The most popular of the gourd *vīṇās* seems to have been the one stringed or *ekatantrī vīṇā*. However, the *vīṇā* may have had more than one string and sometimes it had one more gourd or a box-resonator at the other end. It is seen on the Dvaravati stucco of Thailand, Shiva *Vīṇādhara* on the carvings of Cambodia and Champa and on the reliefs of Borobudur. In Southeast Asia also the depiction of the gourd *vīṇā* is fairly numerous.

The importance *vīṇā* held is well demonstrated by the inscriptions. The Prah-ko inscription talks of women dexterous at playing the *vīṇā*. The

most important of all, the Sadokkokthom II inscription notes the donation of 100 *vīṇās* and 100 *vīṇā*-players by king Uttayadittayavarman II which itself is apt to show the position of the *vīṇā* among musical instruments.

Besides the *vīṇā*, we come to know of stringed instruments that were played with a bow as the inscription of San Chao Muong Lopbhuri mentions a fiddler along with a plucker. One of the very ancient stringed instruments in India played with a bow is called *Rāvaṇa-hasta*. It is noted on some of the inscriptions of Java for example the tenth century plates of Mantyasih. However, judging from attitude towards the instrument in India and its scarce depiction on the sculpture of both the region leads us to believe that the instrument was not very popular until coming of the Muslims.

Next to *vīṇā*, the flute held a high position among the concert instruments. Falling under the *sushira* or aerophonic instrument category, the flute has been depicted right from the early sculpture of Sanchi to the late carvings of *Natarāja* and Krishna. All of these are transversal flutes that are also seen on Payama Pagoda, bronze sculpture of Myanmar, carvings of Champa and reliefs of Borobudur. The flute by name of *veṇu* also appears on the inscription from Cambodia and Thailand. It can be said that the transversal flute was the most important of aerophonic instruments used in Southeast Asia before the eleventh century.

Conch was the other significant *sushira* instruments. It was also considered very auspicious and was used to pour libations in temples. For

some time it was also used as a medium of exchange and its use as an iconographic device is age-old. It was blown in temple during worship, included in the royal procession, sounded in battles etc. The terracotta conches excavated from Prachinburi, Thailand show that such conches were even made artificially. The respect and sanctity of the conch have remained the same till today.

Kāhala that appears on the Prah Einkosei inscription was an instrument like the *shahnāi* and it is mentioned even in the *Yajurveda*. However, it appears that the instrument was not capable of producing melodic sound and its use like trumpets and horns was limited to battles, processions and for signaling. Battle-horns are seen on Angkor and Bayon reliefs. Such horns were called *raṇashringa* in India. Interestingly a horn blower is seen on the terracotta plaque from Myanmar showing musicians and drunken dancer which shows that horns or *shringa* were used during some celebration and feast to heighten the tempo of dancers.

A wide variety of drums were used in India, in the post-Vedic period. Among these the foremost position was occupied by the *mṛdaṅga* of Bharata. Out of the three pieces of *mṛdaṅga* two were vertical and one was horizontal. The *mṛdaṅga* is displayed on number of Indian sculptures like Pawaya carvings, Aurangabad, Ellora sculptures and Ajanta paintings. Similarly it is seen on the sculptures of Champa and Borobudur. The mention of the drum in the inscriptions have also been profuse. The *mṛdaṅga* was certainly the lead concert drum.

Paṇava whose general appearance was similar to *huḍukka*, and *dardura*, the pot drum were other important concert drums. *Paṇava* as *huḍukka* were hour-glass shaped drums. In Indian sculptures of Aurangabad, etc., and in the paintings of Ajanta it is generally seen accompanying the *mṛdaṅga*. The *paṇava* is noted in the Prah Einkosei inscription and seen on the Bayon relief. *Dardura* was made of baked clay pitcher whose mouth was covered with hyde. It is seen on the Borobudur reliefs. Though it is not observed on the mainland Southeast Asia its inclusion in the Bharata's *Puṣhkara Vādyā* along with the *mṛdaṅga* and the *paṇava*, leads us to believe that it was a popular concert drum in Farther India also.

Paṭaha the barrel shaped drum that resembles the modern *ḍholaka* and the *mardala* a slightly larger and almost cylindrical drum were the other concert drum. The *paṭaha* is mentioned in Prah Einkosei inscription of Cambodia and in the inscriptions of Java. The sculptural depictions of the drum in both the region is numerous. In Southeast Asia the drums are seen on Borobudur reliefs, Lara-Djonggrang sculptures and the Angkor carvings that show such drums being used as battle drums. The *muraja* was another drum of the same variety.

Dundubhi and *bherī* were used in battles and processions. *Dundubhi* the goblet drum similar to *nagārā* was used in India since the Vedic times. It was an important drum beaten during war and procession. The *bherī* was used for the same purposes but at times it was also used as a concert drum. It seems to have been of two types: one that was barrel shaped like the

mṛdaṅga and the other large circular drum hung or carried on a pole. *Bherī* is mentioned in inscriptions of Ban-Tat-Thong and Prah Einkosei. The *mṛdaṅga* type *bherī* was hit on one side with stick and the other with hand. The large size circular drum can be observed on the Angkor and Bayon reliefs. Both *duṇḍubhi* and *bherī* may have accompanied the royal procession as the kings of the Indianized kingdoms were known to proceed with conches and drums. The large *bherī* is still used in the temples of south India where it is hung to the roof of temple. The drum used in the Buddhist temples of Thailand called *Bh'el* may be remnant of the ancient *bherī*.

Ḍamarū the favorite drum of Shiva was used in the Southeast Asia which can be said from the widespread worship of Shiva prevalent here. The sculptural depiction of the drum before the 11th century is rare because Shiva was generally worshipped in the form of a *linga*. Though late, the early 13th century sculpture of Chaka-chakra does confirm its use. As such the *ḍamarū* is known in India from the early Christian Era itself. It is still used in the Thai royal ceremony.

Jhallarī a drum like the modern *khañjarī* of India was noted by Bharata. The Prah Einkosei inscription gives some indication that it was used in the region of Thailand and neighboring countries. The reference to *karadi* and *timila* and in the same inscription is surprising as both of them are ancient drums used by the Tamils in south India. They are mentioned among 31 drums noted in the second century Tamil classic *Silappadikāram*.

Enlisted above are the major drums used during the period of the Indianized states. There may have been a few more variety of drums that were modifications of the ones already mentioned.

In a musical ensemble, it is necessary to indicate the stressed and unstressed beats of the *tāla* or rhythm. In India there used to be professional *tāla* indicators who used palms to indicate the rhythm. In the early centuries of Christian Era such professional may have been used in Southeast Asia also. Gradually the place of palms was taken by clappers and cymbals. Metal and wooden chimes can be observed on some of the early sculptures of Amaravati etc. Similar clappers are seen being used by a woman on the Dvaravati stucco of Thailand. There were mainly three variety of cymbals namely small cup-shaped, medium size, and large disc-like. They are called by names like *kāṇṣya*, *kāṇṣyatāla*, *tāla* and the large size cymbals were called *brahmatāla* or *jhālara*. Small cymbals are seen on the Dvaravati stucco while all the three varieties can be seen on the Borobudur reliefs. All cymbals and clappers come under the category of *ghana* or idiophonic instruments.

All four classes of musical instruments were combined in a certain manner to form an ensemble. Such orchestras were already well developed in India before the Christian Era. The Pawaya relief, Ajanta paintings, and sculpture of Ellora and Aurangabad show a highly developed form of orchestras. Bharata mentions two important ensembles namely, of chordophonic and membranophonic instruments. He also prescribes position for players of different musical instrument in relation to the dancer

or audience which is followed by the above mentioned orchestra in sculptures and paintings. Ensemble of string or chordophonic instruments can be seen on the Dvaravati stucco where two types of *vīṇās* are being played. Orchestras employing three or all the four classes of musical instruments can be seen on Borobudur carvings. Close observations shows that the format followed in positioning musicians playing different instruments is similar to the one prescribed by Bharata and followed by the orchestras on Indian sculptures.

Indian music was predominantly religious. In fact, its origin is believed to be in the Vedic hymns and religious practices. As Hinduism and Buddhism reached Southeast Asia they brought with them all the musical tradition. A wide variety of musical instruments was used in temple and religious ceremonies. Most inscriptions note donation of musical instruments like the *vīṇā*, the flute, the cymbals, drums and the conch as well as the musicians expert at playing upon them. The offering of women musicians as noted by the inscription of Sadokkokthom II and Prah Ko was adopted from the practice of *devadāsi* donated to temple in the service of god. Music was a part of daily worships as Hinduism considers worship with music and dance a superior medium to reach the god. Sometimes musicians were also employed in temples and paid for their services. The temple itself formed an important institution of community. Land and infrastructure were donated by king to a leader for building the *devasthān* on the basis of which the man laid foundation of large village community. The *devasthān* encouraged various arts including music, sculptures and architecture. Similar practices of making temples and

offering villages to them is known from the Cholas and Palas of India. The kings and leaders were true patrons of the art of music and musicians were respected people.

However, there was a distinction between the way music was used by Hindus and Buddhists. The music and dance are forbidden to the Buddhists by the *Vinaya* texts. They are considered as a disturbance to meditation and in turn a hindrance in the attainment of *Nirvāṇa*. Buddhists generally used music for celebrations and processions. On the other hand, for Hindus music was associated with worship, celebrations and festivities.

Music was also used in a number of rituals. The celebration during marriages included playing of various musical instruments. Before the dead were burnt on funeral pyre the conches were blown and drums beaten. Requesting rain from the god of *Varuṇa* by Brahmins was important as the main occupation agriculture was dependent on it. Such a ceremony was accompanied by playing of the drums, conches, and other instruments.

Wars and battles were frequent occurrences in the past. Large drums were beaten to gather the warriors. The drums and conches were used to warn people of impending danger. The Prah Einkosei inscription informs us about noise made by number of musical instruments to frighten the enemy. Blowing of horns and conches and beating of drums were necessary to heighten the moral of warriors. The Angkor reliefs show the

battle scene playing all such instruments. Proclaiming victory after war also included the musical instruments.

Musical instruments were also an important part of royal insignia and regalia. The kings of almost all the kingdoms were known to precede by drums, conches, and horns. Music was perhaps also played during the daily appearance of king in court as such a ritual is known to be followed by the kings in contemporary India.

Finally music was an important element of entertainment, celebrations and festivals. As dance and music were patronized by the kings they were principle mode of entertainment for them. On the Borobudur we see number of princes, kings, or god in heaven enjoying dance and music. The people took active interest in dances singsong, dramas and playing musical instruments. Dancing and music which formed a part of the rituals of the temples were also held on grand scale as was the case in India. Especially during festive occasions they provided entertainment to the common people who came to offer worship. There were perhaps dramatic performances on the themes of the *Rāmāyaṇa*, the *Mahābhārata*, and the *Jātakas* that needed a backdrop of music. Such performances including the shadow plays still forms a major part of entertainment in almost whole of Southeast Asia.

In the meantime the people who remained unaffected by the Indian civilization continued to use the indigenous instruments. More musical instruments than the ones discussed at the beginning of this chapter may

have got invented but we hardly have any idea about them. There was a division among different classes similar to the caste system in India. People of lowest class were held with a scorn and so were their musical instruments. With the exception of Borobudur the depiction of native instruments in sculptures and inscriptions is very rare which shows that they were discarded and there was hardly any interaction between then instruments of the two classes. The Borobudur reliefs illustrating the Buddhist text '*Karmavibhanga*' shows people of lower class playing upon their instruments but the music is termed by the text as 'worthless entertainment.' It further says that the one who enjoyed such entertainment would be condemned with being born as a person of inferior status in his next life. The depiction of the indigenous instruments in this manner is apt to show the scornful and detesting attitude of the people towards the native musical instruments. However, we can not completely disregard these instruments as Southeast Asia even today uses number of instruments that were indigenously developed, but information available about them in the Indianized states is very scarce.

Analyzing the musical instruments that were used in the region of Thailand and neighboring countries, it can be observed that all the major instruments that were popular in India during the post Vedic period i.e. 600 B.C. to 800 A.D. made their descent into Southeast Asia. The parallel development of art and architecture and culture observed earlier holds true for the musical instruments also. It was as if the Southeast Asia was just another part of Indian civilization and whatever development that took place in the core of the country expanded to its limits or boundaries.

Continuous wave of settlers and trade must have been instrumental in updating the culture in Southeast Asia with regards to India.

Also, the way music was used in society only confirms what other scholars had declared : the complete Indianization of the whole region. All the musical traditions were adopted from those of India. In this case north and south India contributed to the musical instruments as well as the traditions. This can be said from the appearance of the names of musical instruments from both north and south India simultaneously on the Prah Einkosei inscription of the tenth century and the tradition of *devadāsi* that was so widespread in the southern India.

It must be noted here that the advancement of musical instruments through the ages was not limited to a mere parallel development of forms and styles. Once rooted they activated innovatory currents which without denying their origin, ran their own courses to suit the taste and temperament of the people. Various modifications of the guitar and the gourd *vina* seen on the sculptures of Borobudur and Angkor, the terracotta conches found from Prachinburi, Thailand, *saung-gauk* of Myanmar etc. are examples that demonstrate the statement. Most of the instrument that are used till today have also not remained in the same form in which they were received; they have undergone such modifications that they are sometimes beyond recognition or comparison to the original instruments. Nevertheless the significance of Indian music and musical instruments for giving the foundation to early Southeast Asian music is unquestionable.

Further research must be undertaken to assess the survival and alteration of the Indian musical instrument after the 11th century, the elements of original Indian musical instruments in the Khmer music that drowned the Indian monopoly after the 11th century and the interaction of Indian musical instruments with those of the Chinese and the Muslim cultures that invaded Southeast Asia after the 13th -14th century. Further research with regard to other countries of Southeast Asia separately in present context may help unravel the elements of Indian music and instruments in the music of these countries as well as the instruments that might have been forgotten by India itself.

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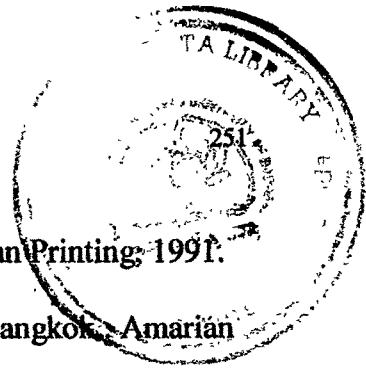
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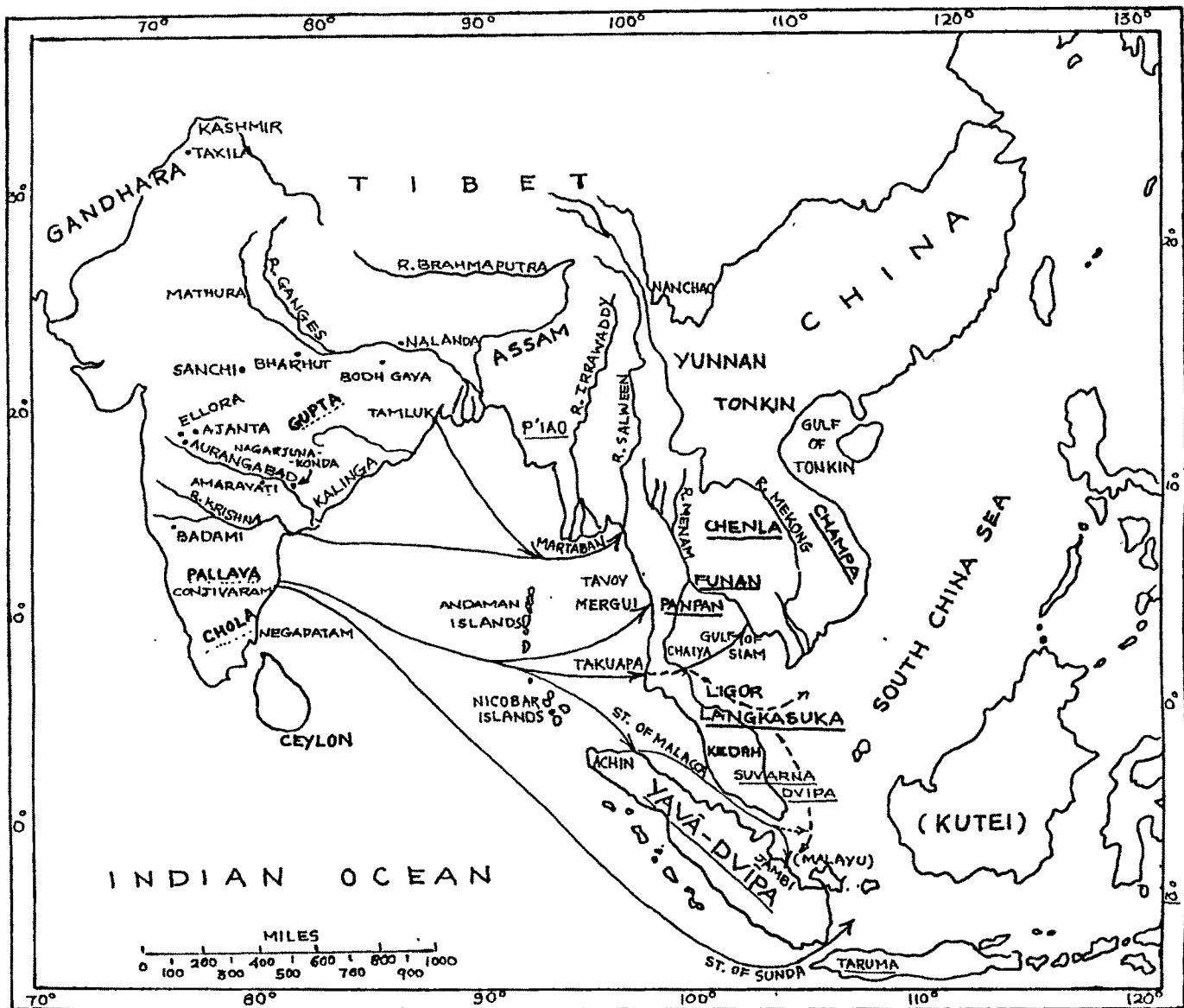
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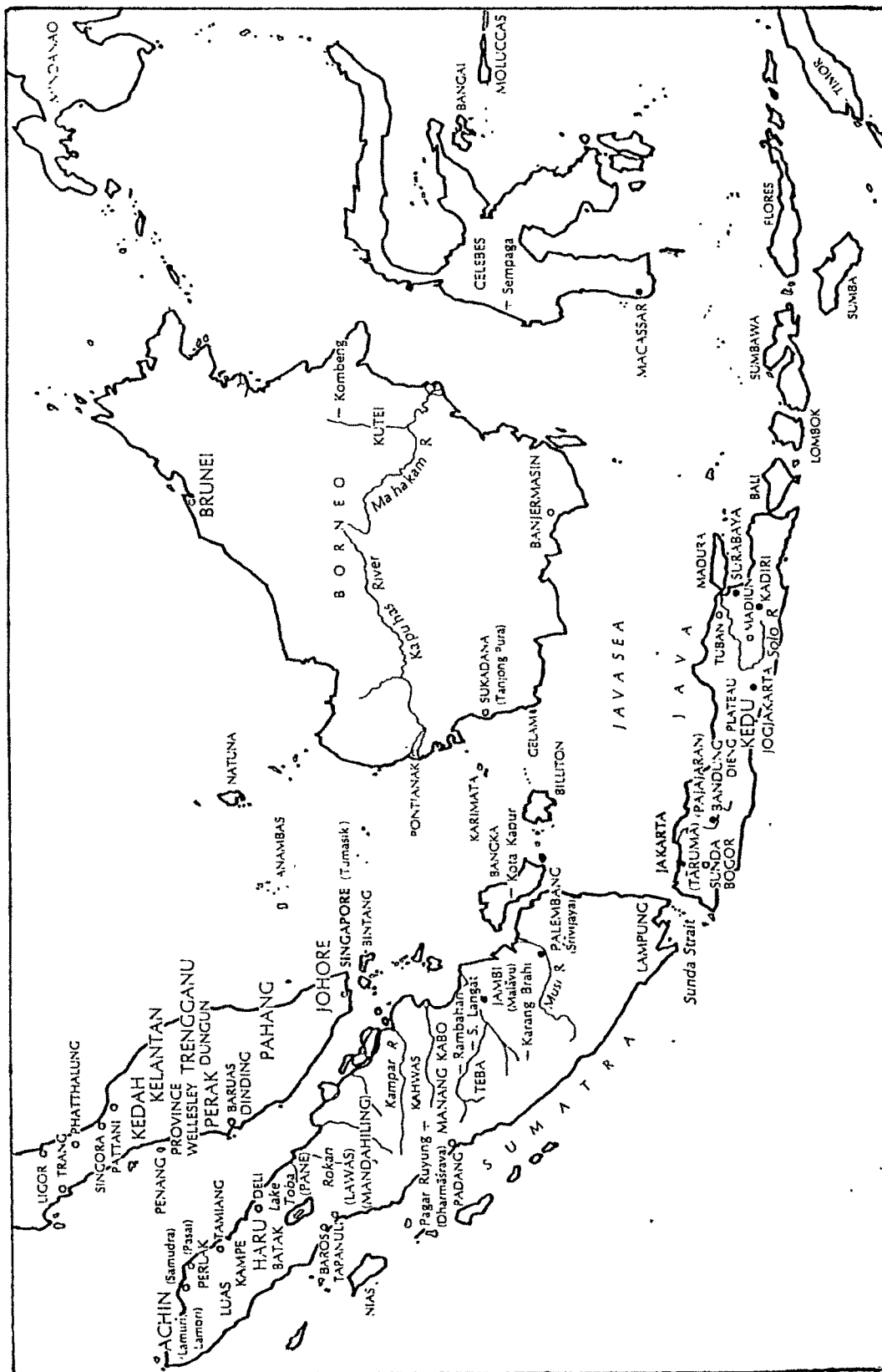
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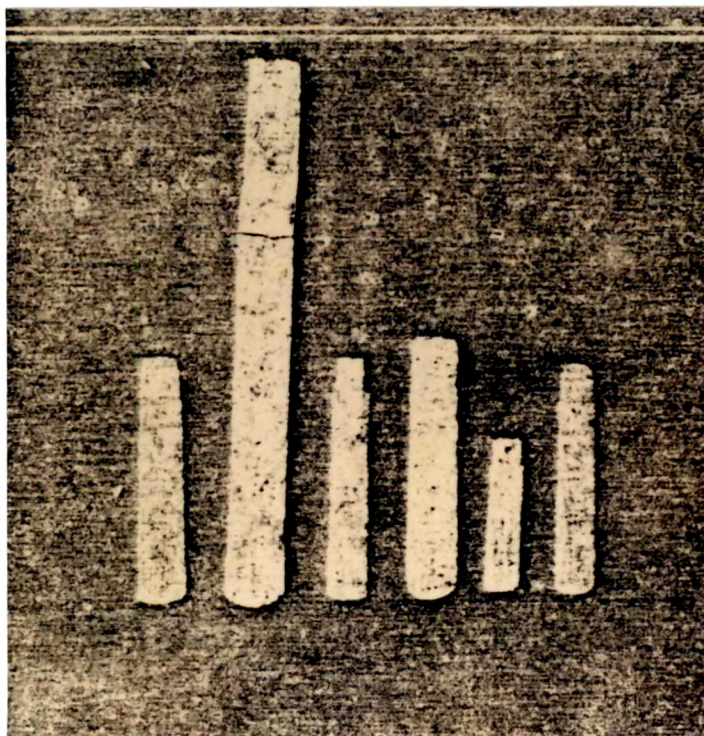
Map 1: Routes followed by the Indians in going to the countries of Southeast Asia. Also showing major archaeological sites of India and kingdoms of Southeast Asia before fifth century.



Map 3: Indochinese Peninsula.



Map 4: Indonesia and Malaysia.



Pl.1. Prehistoric long stone adzes from Tasala, Nakorn-Sri thammarat, southern Thailand.



Pl.2. The Mahoratuk or bronze drum belonging to Dong-son age (c.300 B.C.) found from Tung Yung, Uttaradit, northeastern Thailand.



Pl.3. The Mahoratuk excavated from Ta-Sao, Uttaradit, northeastern Thailand .



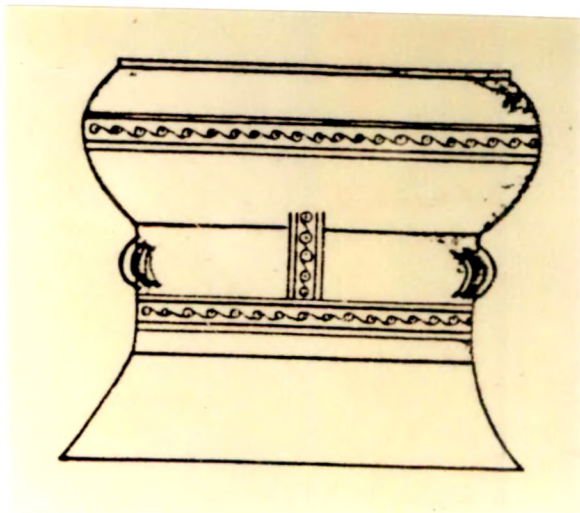
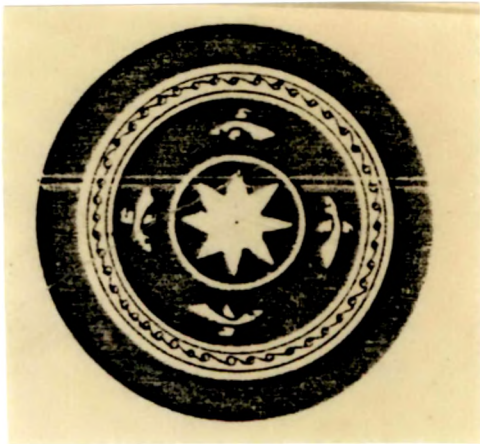
Pl.4. The Mahoratuk excavated from Ta-Sao, Uttaradit.



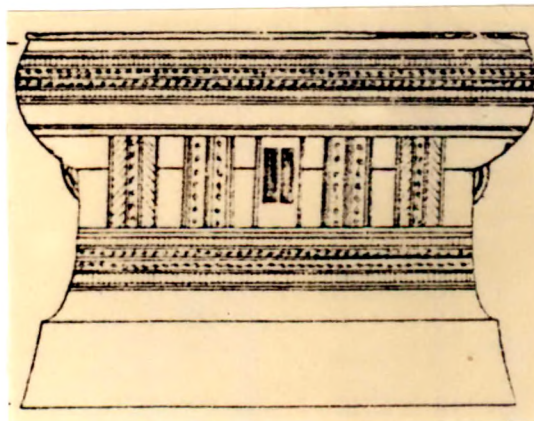
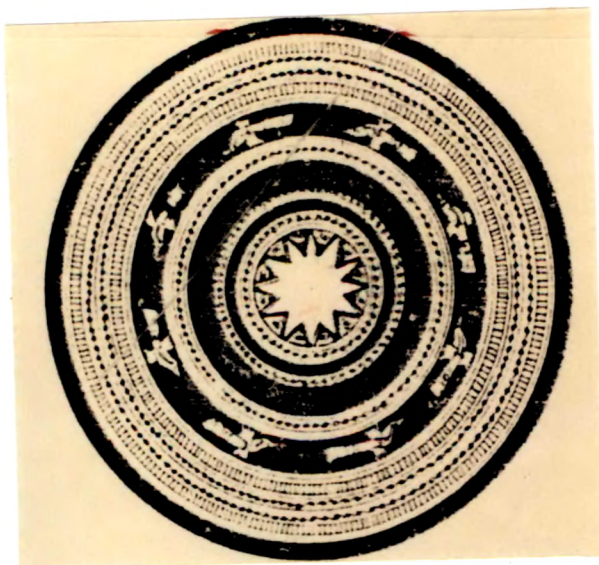
Pl.5. The Mahoratuk excavated from Ta-Sao, Uttaradit.



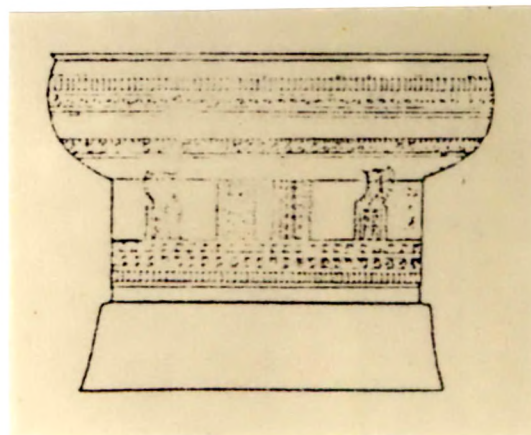
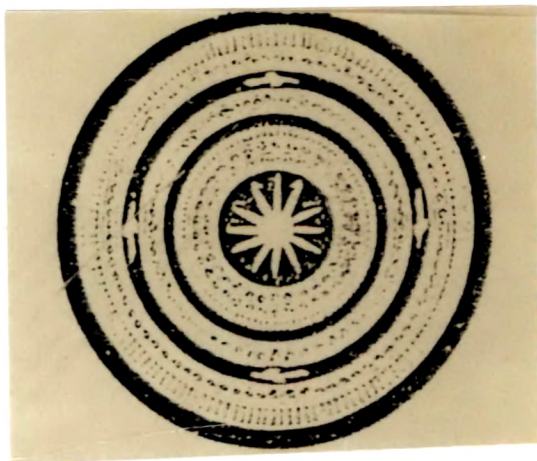
Pl.6. The Mahoratuk found from Ban Sahaskan, Karasin, northeastern Thailand.



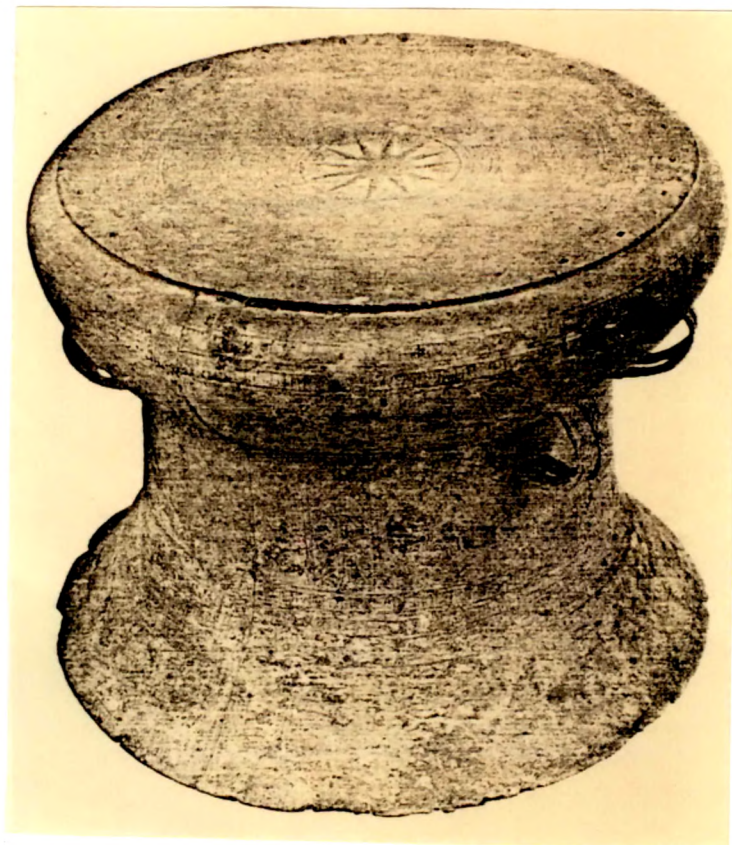
Pl.7. Sketch of the Dong-son bronze drum excavated from Khao Sam Kaew, Chumporn, southern Thailand.



Pl.8. Sketch of the Mahoratuk from Khao Sam Kaew, Chumporn, southern Thailand.



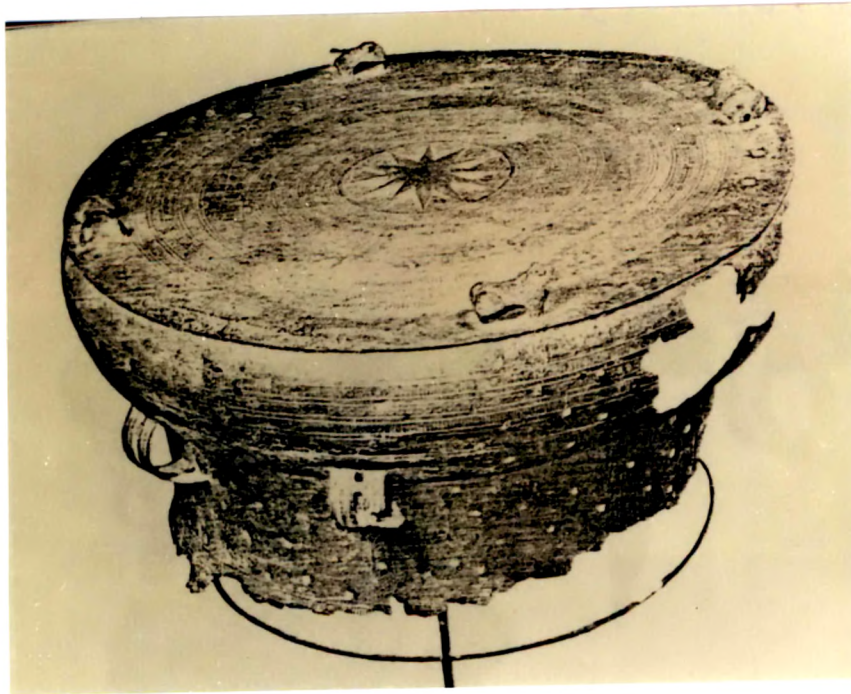
Pl.9. Sketch of the Mahoratuk found from Chaiya, Suratthani, southern Thailand.



Pl.10. The bronze drum
found from Wat
kee-lek, Suratthani,
southern Thailand.

Pl.11. The bronze drum
excavated from
Taling-Ngam,
Suratthani.





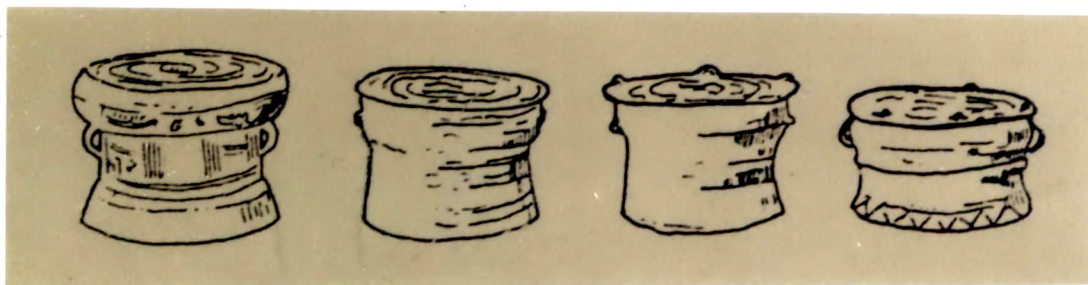
Pl.12. The Mahoratuk found from Ta Rua, Nakorn Srithammarat, southern Thailand.



Pl.13. The Dong-son bronze drum excavated from Ban Chi thuan, Ubon Ratchthani, northeastern Thailand.



Pl.14. The Mahoratuk found from Ban Na Pho Tai, Ubon Ratchthani



Heger I

Heger II

Heger III

Heger IV

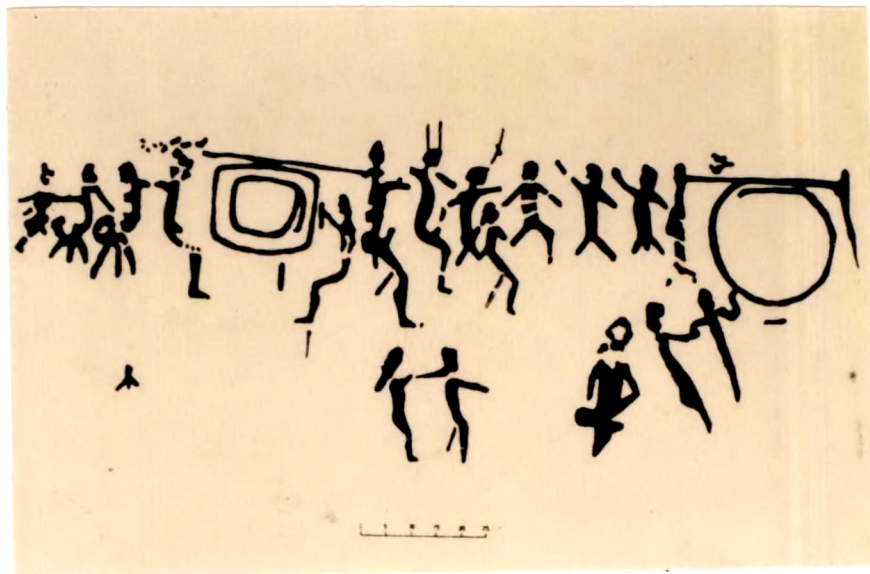
Pl.15. The Mahoratuk of four Heger styles.



Pl.16. The terracotta conch excavated from Ban Raboet Kham, Prachin, Buri, northeastern Thailand (7th - 11th century A.D.)



Pl.17. The terracotta conch excavated from Khao Noi Castle, Prachin Buri, northeastern Thailand. (7th - 11th century A.D. century A.D.)



Pl.13. Prehistoric rock cave painting depicts use of the drums in procession, Ta Duang cave, Kanchanaburi, central Thailand.



Pl.19. The Vishnu image found from Chaiya, Suratthani, southern Thailand, dates around 5th century A.D.

Pl.20. The Vishnu sculpture found from Ho Phra Narai, Nakorn Srithammarat, southern Thailand, dates around 5th - 6th century A.D.





Pl.21. The Vishnu image excavated from Wat Phra Phreng, Nakorn Srithammarat, southern Thailand, dates around 5th - 6th century A.D.

Pl.22. The Vishnu sculpture found from Wiang Sa Suratthani, Thailand, dating around 7th century A.D.





Pl.23. The Vishnu image found from City Post Shrine, Songkhla , southern Thailand, dates around 8th century A.D.

Pl.24.
The Vishnu sculpture from San Phra Narayana Surathani , southern Thailand, dates around late 11th century A.D.





Pl.25. The lintel on Prasat Hin Phnom Wan (Rock Castle) Nakorn Ratchsima , northeastern Thailand, Bakhang art, dates 10th century A.D.



Pl.26.
The lintel on Prasat Hin Muang Khaek, Nakorn Ratchsima, northeastern Thailand, in Koh-Kae art style, dates around 10th century A.D.



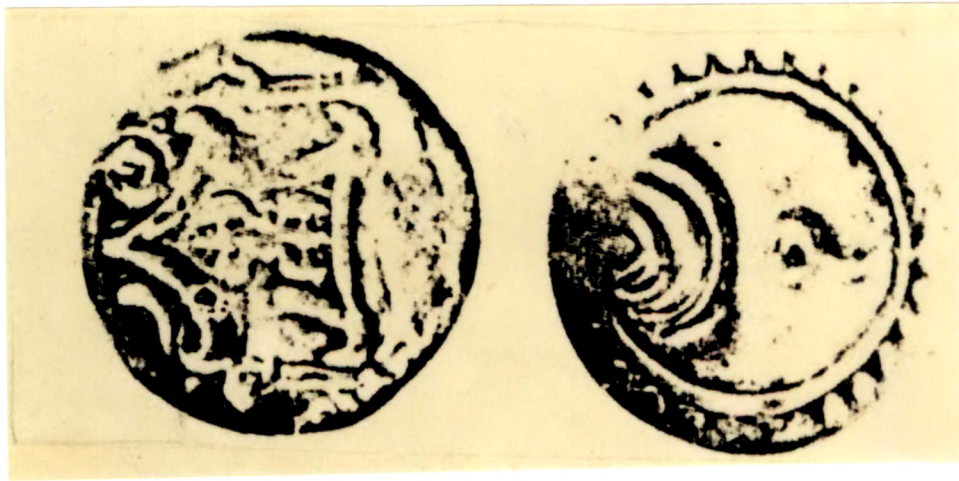
Pl.27. Bas-relief depicts a group of musicians with musical instruments found from Ku Bua, Ratchburi, central Thailand, dated 7th century A.D. (Dvaravati).



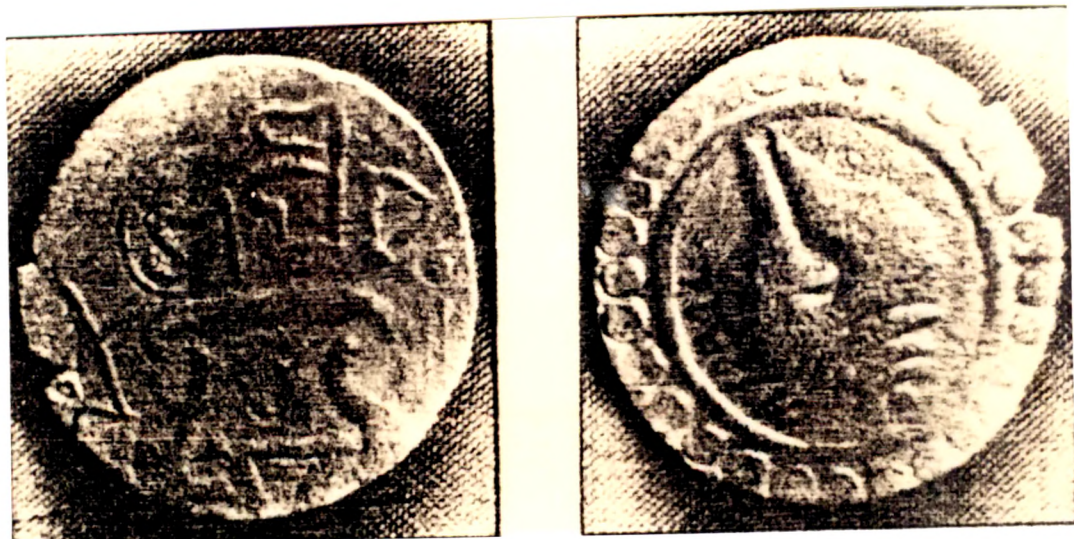
Pl.28. The stucco showing *kinnara* playing the gourd *vīṇā* from Nakorn, Pathom, central Thailand, 7th century A.D. (Dvaravati)



Pl.29. The bas-relief found at Prapathom Chediya Nakorn Pathom dated 725-775.A.D.



Pl.30. The conch on the silver coin excavated from Nakorn Pathom, central Thailand, Dvaravati period.



Pl.31. The conch on silver coin found from Lopburi, central Thailand, Dvaravati period.



Pl.32. Coin with the *damarū* figure found from Lopburi, central Thailand, Dvaravati period.



Pl.33.

Brahma, Vishnu and Śiva
from Hmawza, Myanmar,
dating 8th century A.D.

Pl. 34.

Vishnu on *Padmāsana*
from Nat-Hlaung-Kyaung,
Myanmar, dates 10th -
11th century.





Pl.35. Hard clay tondo depicting musicians and drunken dancer, south Myanmar, 8th century, early Indian style.



Pl.36. Detail from bronze sculpture of musicians group from Payama Pagoda, Myanmar, 9th century.



Pl.37. Bas-relief under Buddha from Nagayon temple, Myanmar, 11th - 12th century.



Pl.38.
 Harihara from Prasat Tra
 Pang Pong, Cambodia,
 dating 723-807 A.D.

Pl.39.
 Vishnu in Kulen style
 found from Rup Arakh,
 Cambodia, dating 827-
 877 A.D.





Pl.40. Vishnu on *garuḍa* on the wall of Krawan Castle, Cambodia, 897-927 A.D.



Pl.41.
Śiva *viṇadhara* on the
tympanum of the eastern
gopura from Phnom Chisor
Cambodia 9th century.

Pl.42.
Śiva *viṇadhara* on
tympanum of the
southern mandapa
from Baset Castle
Cambodia, 1017-
1087 A.D.





Pl.43. A relief depicting a procession on the wall of Prasat Bayon, Cambodia, dating 11th - 12th century.



Pl.44. Vishnu carving from Phong-le, Champa (Vietnam), dating 9th - 10th century.



Pl.45.
Siva with *vīṇā* from Kuang
My, Champa, 8th century.

Pl.46.
Musicians playing
the gourd *vīṇā* in Tra-
Kieu style, Champa,
10th century.





Pl.47. Śiva Natarāja from Phong le 9th - 10th century.



Pl.48. Śiva Natarāja in Myson A₁ style, Cham Museum, 10th century.

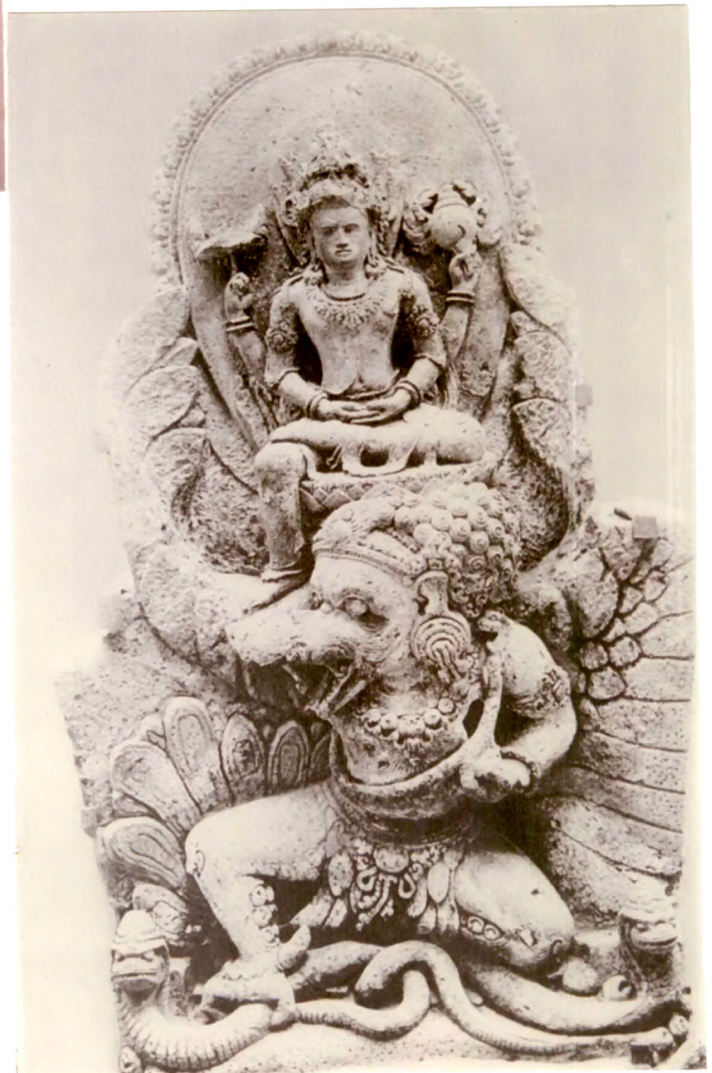


Pl.49. Two musicians (Pedestal of Myson E₁), Champa.



Pl.50.
Vishnu image from
Tribuaja, Indonesia
6th - 7th century.

Pl.51.
Vishnu in the form
of portrait statue of
Airlanga, Belahan,
Indonesia, 11th century.





Pl.52. The bas-relief depicting prince and his consort enjoying dance and music, Borobudur, 9th century.



Pl.53. Sudhana beholds Maitreya, second gallery, Borobudur.



Pl.54. One of the series of reliefs illustrating' Buddhist text *Karmavibhanga*, depicts musicians playing indigenous musical instruments.



Pl.55. Drummer and dancers from Chandi Lara Djonggrang, Java, 10th century.



Pl.56. Rousing Kumbhakarna, Chandi-Lara Djonggrang, Java, 10th century.



Pl.57.
Bronze Tara found from
Ngandjuk (kederi),
Indonesia, 8th - 9th century.

Pl.58.
Chakra Chakra from
neighbourhood of
Singasari, Java, early
13th century.





Pl.59.
Vishnu sculpture
at Patna, Bihar, 1st
century, India.



Pl.60.
Vishnu on *garuda*
from Rajgir , 4th
century.



Pl.61. Sandstone sculpture of Vishnu at Mathura, India, 4th century.



Pl.62. Wall painting, musician group at Ajanta cave I, 6th - 8th century.



Pl.63. *Māndhātā* roundel, Amaravati, 2nd century.



Pl.64. A terracotta plaque depicting Vishnu on *garuḍa* from Bhitagaon, India, 5th century.



Pl.65. Vishnu *Śeṣāshāyin*, Huchchappucuyya gudi Aihole, 6th - 7th century.



Pl.66.
Mahiṣāsurmardini, Badami
Cave , India , 720 A.D.

Pl.67.
Vishnu on the wall of
Virupaksha Temple,
India, 8th century.





Pl.68. Buddha meditating, Kashmir, 8th century.



Pl.69.
Vishnu image from
Kashmir, 9th century.

Pl.70.
Vishnu standing on
Padmāsana, India, mid.
10th organization early
11th century.





Pl.71. Dancer and musician women, Bharhut Stupa, south gate, *Prasenajit* Pillar, early 1st century.



Pl.72. Musicians, Nagarjunakonda, 3rd century.



Pl.73. Bas-relief depicting musician couples, Nancha-Kuthara India, 5th century.



Pl.74. Descent of Bodhisattava in the form of white elephant, Amaravati, 2nd century.



Pl.75. Śiva *vīṇadhara*, Alampur, 7th - 8th century.



Pl.76. Śiva *vīṇadhara* on *nandi* from Dacca, 9th - 11th century.



Pl.77. Orchestra and dancer, Pawaya, India, 5th century.



Pl.78. Natarāja at Sirpur, Raipur, 5th century.



Pl.79. Ajanta cave I, left wall, detail from *Mahājanaka Jataka*,
gandharavas and *apsaras*. (600-642 A.D.)



Pl.80. Orchestra and dancing girl, Aurangabad, 7th century.



Pl.81. Śiva Natarāja from Alumpur, 8th century.

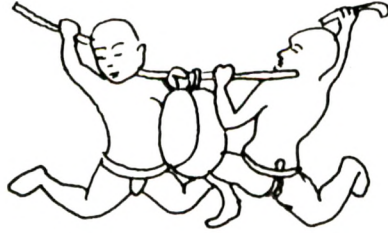


Fig. 1: Monks adoring as a drum like the *bherī* is beaten by dwarfs, Amaravati 2nd century. (below)





Fig. 2: Detail from the Titan of *Kālanemi* in his Dragon Chariot, north gallery, western half, Angkor Wat early 12th century A.D. (below)

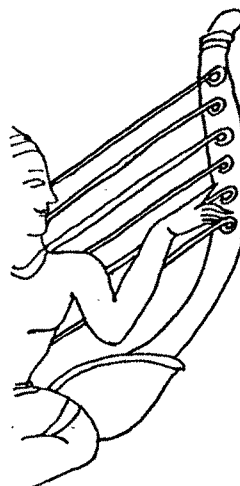




Fig. 3: Detail from battle scene of the *Mahābhārata*, western gallery, southern half, Angkor Wat.



The gourd *vīṇā*



The harp *vīṇā*

Fig. 3A: *Vīṇā*-players from Angkor Wat.



Fig. 4: The music concert, Borobudur. (Below)

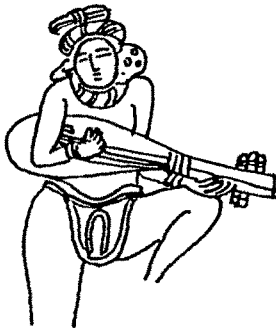




The harp *vīṇā*,
Amaravati



The harp *vīṇā*,
Nagarjunakonda



The guitar *vīṇā*,
Nagarjunakonda



Vīṇā player, Nalanda,
location-2, 6th century



Vīṇā-player,
Ajanta, Cave I



The gourd *vīṇā*,
Mamallapuram



Vīṇā-player,
Ajanta



The *vīṇā* with two
gourds, Rangpur
9th century.

Fig. 5: Different type of *vīṇās*.



Champa



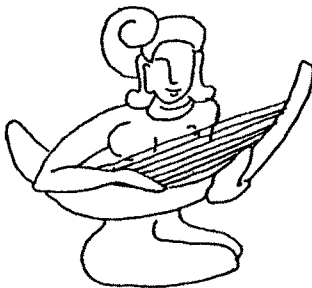
Champa



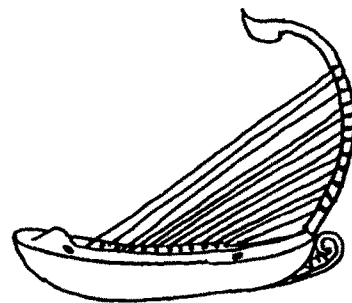
Borobudur



Borobudur

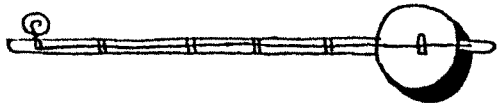


Myanmar

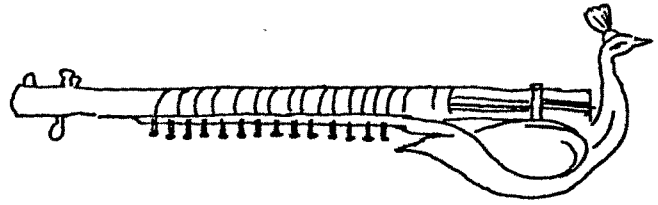


Modern *Saung Gauk*
of Myanmar

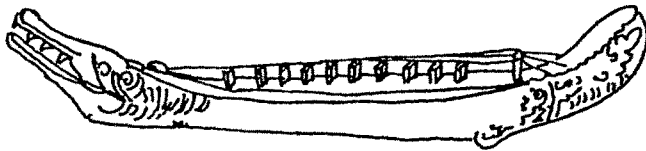
Fig. 6: *Vīṇās* of Southeast Asia.



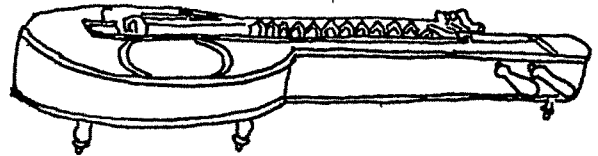
One string vīṇā



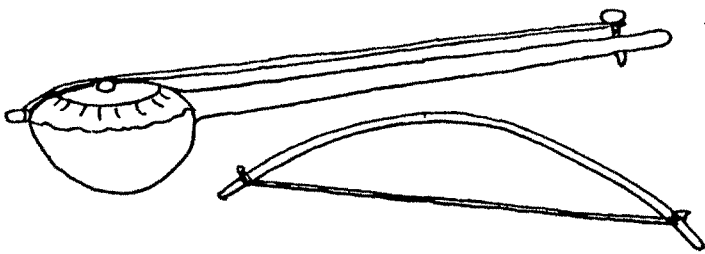
Modern *Mayūri* vīṇā of India



crocodile vīṇā



Today's *Jakhay* of Thailand



Rāvaṇa-hasta
or
Rāvaṇa-hattha

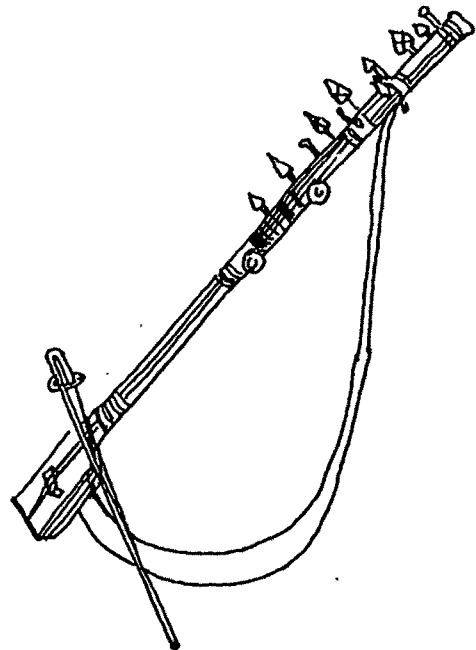
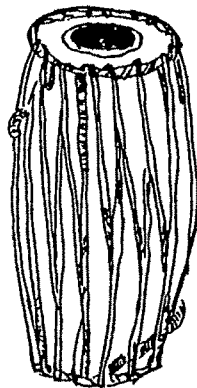


Fig. 7: Chordophonic instruments



Pataha like drum,
Kashmir



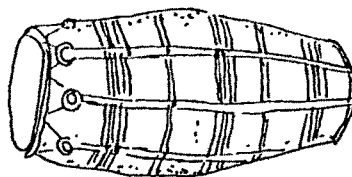
Modern *mṛdaṅgam*
of Karnataka music



Playing two pieces
of *mṛdaṅga*, Badami



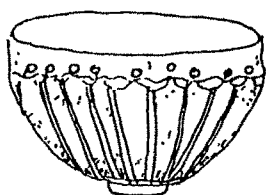
Three pieces of Bharata
era *mṛdaṅga*, Ajanta



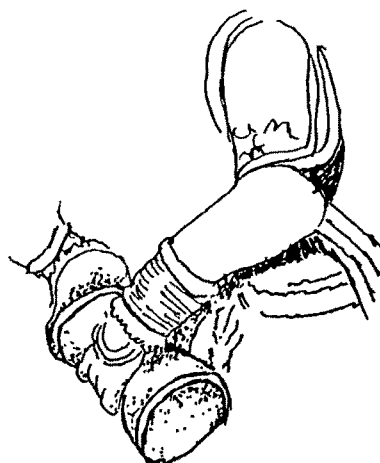
Today's *dholaka*



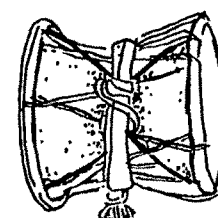
A drum similar to
pataha, Ranakapur,
12th - 13th century



Modern *nagāra*
(*duṇḍubhi*)

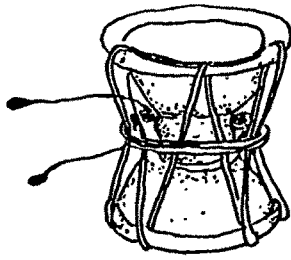


Paṇava or *huḍukka*,
Markonda, 1250 A.D.



A kind of *huḍukka*

Fig. 8: Membranophonic instruments.



Damarū



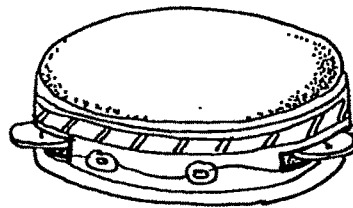
Playing the *dardura*,
Alumpur Papnashini
7th - 8th century.



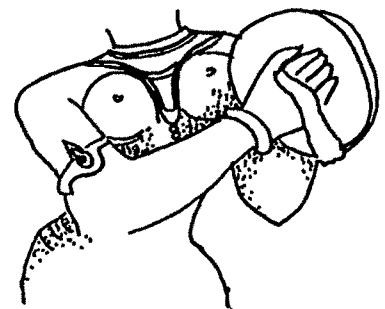
Mādal of tribals



Pataha- player and
cymbalist, Nalanda
Location-2



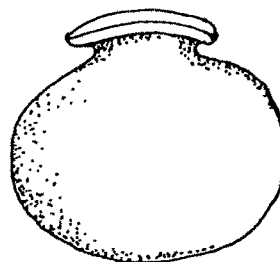
Today's *Khañjarī*



Jhallarī-Player,
Konark, 1250 A.D.



Drum-player,
Sanchi



Ghata of today

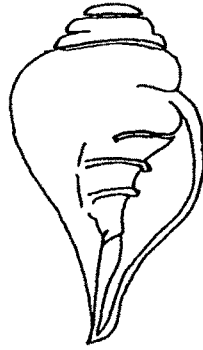


Muraja - type drum,
Nagarjunakonda

Fig. 9: Membranophonic instruments.



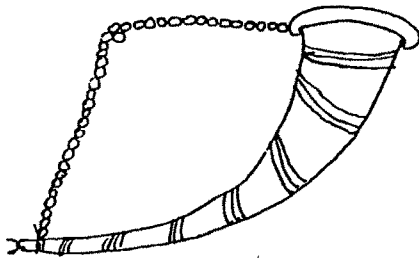
Conch-blower,
Nagarjunakonda



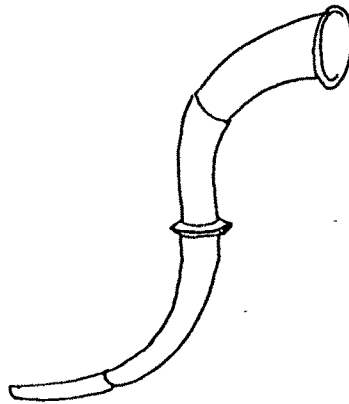
Shankha or conch



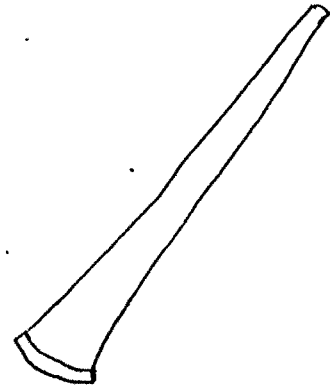
Flute player, Khajuraho



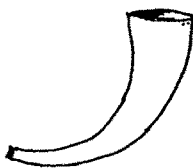
Shringa



Battle horn



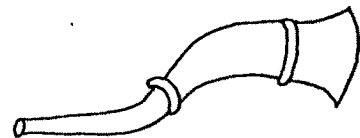
Straight trumpet or
tūrryā.



Animal horn

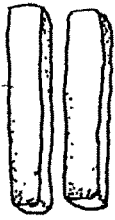


Flutist, Khajuraho.

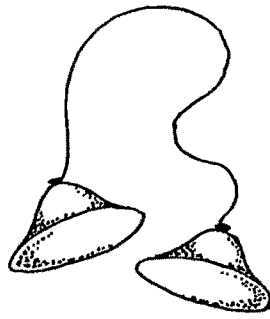


A kind of trumpet

Fig. 10: Aerophonic Instruments.



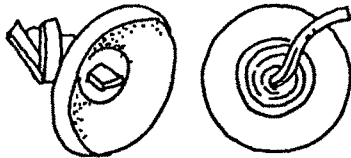
Clappers



Small cymbals



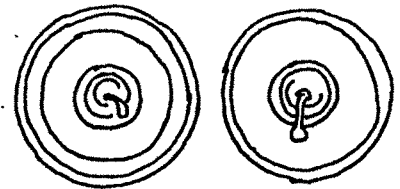
Cymbalist, Nagarjunakonda



Medium size cymbals,
tāla or *kānsya-tāla*



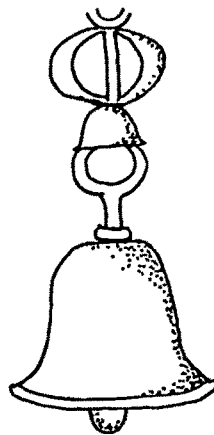
Cymbal-player
Khajuraho



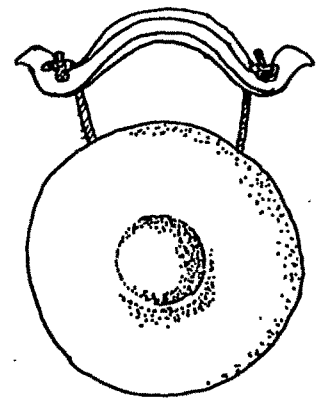
Large - cymbals or
Brahmatāla (also *Jhālara*)



Playing *Brahmatāla*
Alampur, Papnashini



Bell or *Ghanta*

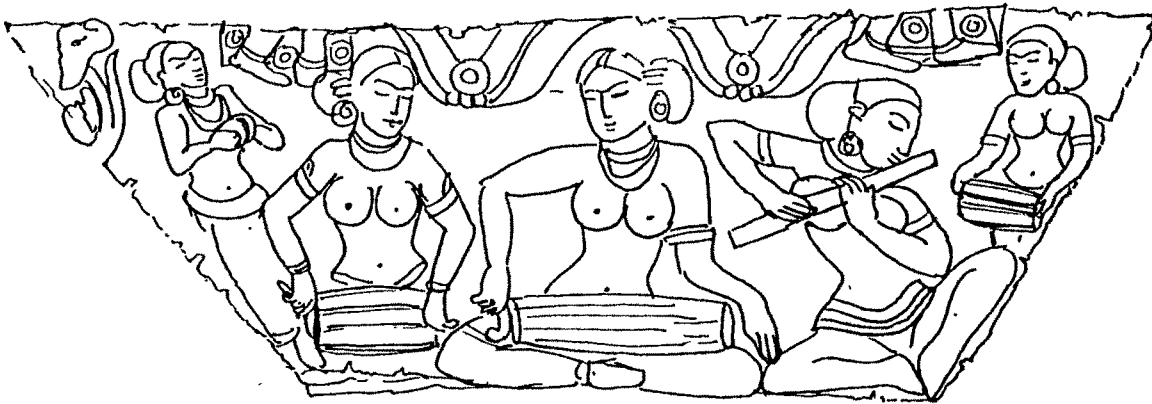


Gong

Fig. 11: Idiophonic instruments



Khajuraho



Trapezoidal side panel of *mukhshala*
Muktesvara, Bhubaneshtar, c.9th century.



Khajuraho, Lakshmana Temple

Fig. 12: Orchestras

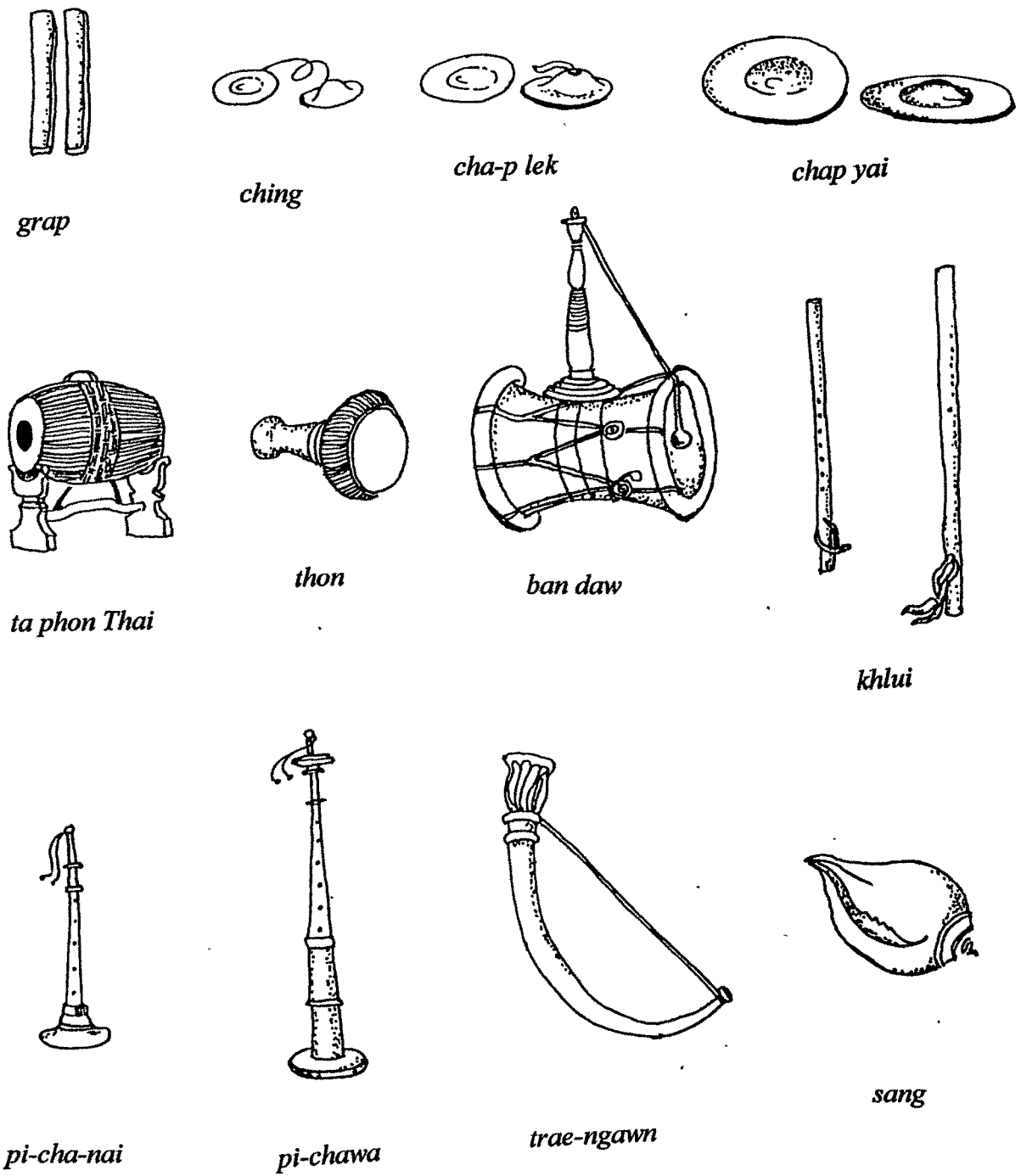
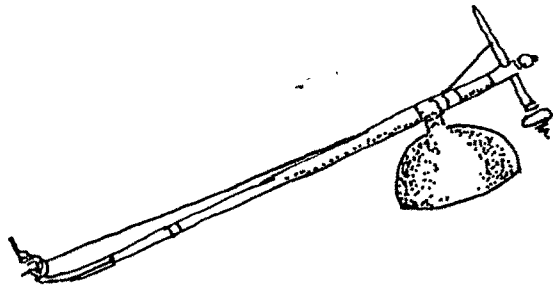
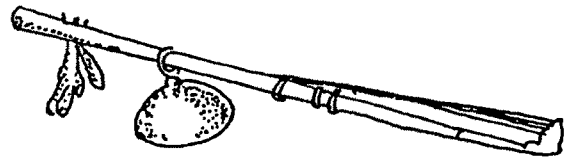


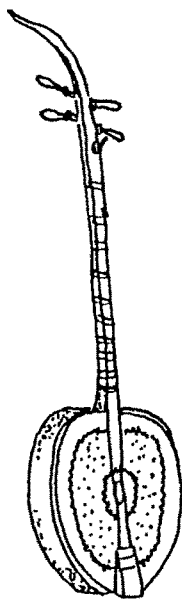
Fig. 13: Modern Thai musical instruments that evolved from Indian instruments.



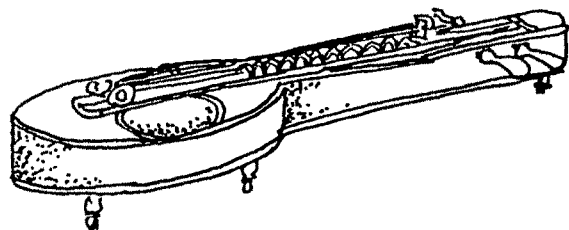
phi-n nam tao



phin phia



gra jap pi



jakhay

Fig. 14: Modern Thai musical instruments that evolved from Indian instruments.



**THAI MUSICAL INSTRUMENTS BASED ON
ARCHAEOLOGICAL AND OTHER RELATED SOURCES
FROM THE ANCIENT TO MEDIEVAL PERIOD IN
INDIAN CONTEXT.**

SUMMARY

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MAY, 1998

Summary

Indian trade and settlement from the beginning of Christian Era brought about revolutionary changes in the life and culture of the people of Southeast Asia. The contact between the two regions was however well established before the first century A.D., as there are references to *Yāvadvīpa*, *Suvarṇabhūmī* and *Suvarṇadvīpa* belonging to this region, in the *Rāmāyaṇa*, the *Purāṇas* and the *Jātakas*. The Indian settlers, majority of which comprised of Sanskrit scholars, monks, and priests brought with them the great religions namely Hinduism and Buddhism. The peaceful introduction of Indian skills, social patterns and religion of the civilization completely Indianized the entire region of Southeast Asia that uptill now was at a lower level of almost savage culture.

From this Indianization was born a series of kingdoms that in the beginning were true Indian states : Cambodia, Champa and the small states of the Malay Peninsula; the kingdoms of Sumatra, Java, and Bali; and finally, the Burmese and Thai kingdoms, which received Indian culture from the Mons and Khmers. The resultant culture was a product of the Indian influence and interaction among these kingdoms. It is because of this homogeneity in the cultural evolution that the history of the entire region is needed to be taken into account. Such was the power of Indian impact that the native cultures virtually lost their identity and sought refuge in the lowest cadre of the Indian caste system adopted here. The elite class

consisted of kings, brahmins, and administrators or the people who had adopted Hinduism or Buddhism as their religion. It was from the early Khmer kingdom (Funan and Angkor), Mon kingdom (Dvaravati) etc., that the Thai received the Indian culture, who established a powerful kingdom after the 12th century. This culture obviously included the great traditions of Indian music and musical instruments.

However, before the coming of Indian civilization the native of Southeast Asia did use certain primitive form of musical instruments. The earliest of these could be the prehistoric lithophone : six long stone adzes of various sizes capable of producing different notes found from Thailand. This primitive instrument may have been the earliest forerunner of the modern day xylophone. Chinese records dating far back to 800 B.C. informs us about bamboo wind instruments like mouth organ and jew's harp used by these people. These early bamboo instruments may have included crude form of early xylophone. The coming of bronze age saw an important musical instruments called *Mahoratuk*, the bronze kettle drums. The *Mahoratuk* was spread in the entire Southeast Asia, the earliest of which excavated from Thailand dates to earlier than 300 B.C. Number of ceremonies, beliefs and rituals were attached with the *Mahoratuk* especially among the tribals. The drum continues to be used till today.

Before Indianization began in Southeast Asia, India had well established musical tradition. The Vedic period had seen development and consummation of various musical instruments. The beginning of Indian

acculturation and the time early Indian kingdoms of Southeast Asia fall under the post Vedic in India i.e. 600 B.C. - 800 A.D. Around the beginning of the Christian Era was the time of the great dramatist Bharata who in his classic treatise *Nāṭya-śāstra* laid down number of rules for the make and the technique of playing the musical instruments. The ideas of Bharata had a great impact on the depiction of musical instruments in later sculptures and paintings.

The most important of the Indian musical instruments was the *vina*. The early sculptures of India frequently depict the *vīṇā* of the harp type. Such *vīṇās* are also observed in the sculptures of Southeast Asia dating 6th - 12th century A.D. Around the sixth century A.D. the guitar shaped *vīṇā* replaced the harp *vīṇā*. Similar *vīṇās* are observed on Southeast Asian sculptures most notable of which are the Dvaravati stucco from Thailand and Borobudur reliefs from Indonesia. Though the early form of the modern gourd *vīṇā* starts appearing from the fourth century A.D., it becomes very popular after the eighth century. Again the *vīṇā* can be observed on the sculptures of almost whole Southeast Asia.

The flute was the next important musical instruments. Most Indian sculptures and painting show the transversal flute. Similar flutes can be observed on Southeast Asian art. The conch was an auspicious aerophonic instrument used in temples procession and war. It generally appears in the hands of numerous Vishnu images found from the entire region. Besides these trumpet and horn were also used which were directly adopted from India.

A wide variety of drums popular in the post Vedic period are noted simultaneously on India sculptures and Southeast Asian epigraphy as well as art. Most important concert drums were *mrdaṅga*, a set of three pieces of barrel shaped drums, *paṇava* or *huḍukka*, the hour-glass shaped drum, *dardura*, the pot drum, *paṭaha* drum like the modern *ḍholaka* of India etc. *Dundubhi* the goblet like the *nagārā* and *bherī* a drum circular as well as barrel shaped were used in war, procession and in temples. Besides these *ḍamarī*, *jhallarī* and, the ancient drums of the Tamils *karadi* and *timila* were also noted.

Cymbals and clappers were used to indicate the rhythm. The cymbals of three varying sizes similar to the ones observed on Indian art were found from Southeast Asia. The clappers can be seen on the Dvaravati stucco found from Thailand.

Various classes of musical instruments described above namely chordophonic, aerophonic, membranophonic and idiophonic (traditionally *tata*, *sushira*, *avanaddha* and *ghana*) were combined in a certain manner to form an ensemble. Different types of orchestras were prevalent in the post Vedic period. They are observed on various sculptures and paintings most notably from Pawaya, Ajanta, Aurangabad etc. Similar orchestra adopting the same format prescribed by Bharata and followed by the Indian sculptures can be observed in Southeast Asia.

While the sculptures and antiquities show form and shape of the musical instruments, the epigraphical sources furnish us with information

on the use and position of musical instruments in society. The inscription found from Thailand and neighboring region mention that music was most importantly associated with religious practices and daily worships. Musicians especially women were donated by the kings to the temples in the service of gods, similar to the *devadāsi* tradition of India. Drums and conches were used during processions, war and funeral. Music was also a part of marriage celebrations, rain-requesting ceremonies, festivals and general entertainment. Like the musical instruments themselves these traditions were also adopted from India.

Meanwhile the indigenous musical instruments were continuously used by the people who remained largely unaffected by the Indian civilization. However this people were considered to be of inferior status and so were their musical instruments. As a result we hardly find the depiction of the native musical instruments in the sculptures or epigraphy which was dominated by the Indian instruments only. A Borobudur relief depicting indigenous musical instruments even term their music as worthless or low grade entertainment.

Observing the various developments in art and culture of Southeast Asia during the Indianized state it can be seen that there was almost parallel advancement of these between the two region. A trait popular in India soon found its way to the Farther India as if it was one of India's own territory. Learning from the musical instruments adopted from India the Southeast Asian people did modify them to suit their own taste. Number of musical instruments from India, unchanged or in modified form continue to be used till today.